



1 . Identification of the material and supplier

Product name	SBX Grease 2
Product use	Machinery lubricant. For specific application advice see appropriate Technical Data Sheet or consult our company representative.
Supplier	BP Australia Pty Ltd (ABN 53 004 085 616) Melbourne Central, 360 Elizabeth Street, Melbourne, Victoria 3000, Australia Tel: +61 (03) 9268 4111 Fax: +61 (03) 9268 3321
EMERGENCY TELEPHONE NUMBER	1800 14 14 74
OTHER PRODUCT INFORMATION	Technical Help Line 1 300 557 998 (Local Call)
Product code	461364-AU13

2 . Hazards identification

Statement of hazardous/dangerous nature NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.

3 . Composition/information on ingredients

Highly refined mineral oil and additives. Thickening agents.

This product does not contain any hazardous ingredients at or above regulated thresholds.

4 . First-aid measures

Eye contact	In case of contact, immediately flush eyes with a copious amount of water for at least 15 minutes. Get medical attention if irritation occurs.
Skin contact	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops. Accidental high pressure injection through the skin requires immediate medical attention.
Inhalation	If inhaled, remove to fresh air. Get medical attention if symptoms appear.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately.
Notes to physician	Treatment should in general be symptomatic and directed to relieving any effects. Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discoloured and extremely painful with extensive subcutaneous necrosis. Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimise tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes.

5 . Fire-fighting measures

Extinguishing media	
Suitable	In case of fire, use water fog, foam, dry chemical or carbon dioxide extinguisher or spray.
Not suitable	Do not use water jet.
Hazchem code	These products are carbon oxides (CO, CO ₂) (carbon monoxide, carbon dioxide), sulphur oxides (SO ₂ , SO ₃ , etc.). Some metallic oxides.

Unusual fire/explosion Hazards	This material is not explosive as defined by established regulatory criteria.
Special fire-fighting procedures	None identified.
Protection of fire-fighters	Fire-fighters should wear self-contained positive pressure breathing apparatus (SCBA) and full turnout gear.

6 . Accidental release measures

7 . Handling and storage

Handling	Wash thoroughly after handling. Avoid strong oxidisers.
Storage	Keep container tightly closed. Keep out of the reach of children. Keep container in a cool, well-ventilated area.
Combustibility Classification	Combustible liquid Class C2 (AS 1940).

8 . Exposure controls/personal protection

Ingredient name	Occupational exposure limits
Base oil - unspecified	NOHSC (Australia). TWA: 5 mg/m ³ 8 hour(s). Form: Oil mist, mineral
molybdenum sulphide	NOHSC (Australia, 8/2005). TWA: 10 mg/m ³ 8 hour(s). Form: Insoluble
Graphite	NOHSC (Australia, 8/2005). STEL: 3 mg/m ³ 15 minute(s). Form: Respirable dust

Whilst specific OELs for certain components are included in this SDS, it should be noted that other components of the preparation will be present in any mist, vapour or dust produced. For this reason, the specific OELs may not be applicable to the product and are provided for guidance purposes.

Biological Limit Values No biological limit allocated.

Exposure controls

Occupational exposure controls

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Personal protective equipment

Respiratory protection

None required; however, use of adequate ventilation is good industrial practice.

Skin and body

None required; however, use of protective clothing is good industrial practice.

Hand protection

Wear protective gloves if prolonged or repeated contact is likely.
Chemical resistant gloves. Recommended: nitrile gloves.
The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Eye protection

Safety glasses with side shields.

9 . Physical and chemical properties

Physical state	Grease.
Colour	Dark grey.
Odour	Oily.
Flash point	>150 °C (Closed cup) Pensky-Martens.
Vapour pressure	Not available.
Vapour density	
pH	
Boiling point / range	
Melting point / range	
Relative density/Specific Gravity	
Density	900 kg/m ³ (0.9 g/cm ³) at 15°C
Solubility	

10 . Stability and reactivity

Stability	The product is stable.
Conditions to Avoid	Avoid extreme temperatures, strong oxidizers, fire.
Incompatibility with various substances/Hazardous Reactions	Reactive with oxidising agents.
Hazardous Decomposition Products	These products are carbon oxides (CO, CO ₂) (carbon monoxide, carbon dioxide), sulphur oxides (SO ₂ , SO ₃ , etc.). Some metallic oxides.

11 . Toxicological information

Effects and symptoms

Eyes	Unlikely to cause more than transient stinging or redness if accidental eye contact occurs.
Skin	Unlikely to cause harm to the skin on brief or occasional contact but prolonged or repeated exposure may lead to dermatitis.
Inhalation	At normal ambient temperatures this product will be unlikely to present an inhalation hazard because of its low volatility.
Ingestion	Unlikely to cause harm if accidentally swallowed in small doses, though larger quantities may cause nausea and diarrhoea.
Chronic toxicity	
Carcinogenic effects	No component of this product at levels greater than or equal to 0.1% is identified as a carcinogen by ACGIH, the International Agency for Research on Cancer (IARC), the European Commission (EC), or the National Occupational Health and Safety Commission (Australia).

12 . Ecological information

Ecotoxicity	Not classified as environmentally hazardous in accordance with the 'Approved Criteria for Classifying Hazardous Substances' [NOHSC (1008)/2004 as amended and adapted].
Biodegradability	
Persistence/degradability	The biodegradability of this material has not been determined.
Bioaccumulative potential	This product is not expected to bioaccumulate through food chains in the environment.
Other ecological information	Unlikely to be harmful to aquatic organisms.

13 . Disposal considerations

Special Precautions for Landfill or Incineration	No additional special precautions identified.
---	---

14 . Transport information

International transport regulations

Regulatory information	UN number	Proper shipping name	Class	Subsidiary class	PG*	Label	Additional information
ADG Classification						----	
IMDG Classification						----	
IATA/ICAO Classification						----	

PG* : Packing group

Special precautions for user	No known special precautions required. See Section: "Handling and storage" for additional information.
-------------------------------------	--

15 . Regulatory information

Control of Scheduled Carcinogenic Substances

Ingredient name

No Listed Substance

Schedule

Other regulations
Inventories

Product name SBX Grease 2	Product code 461364-AU13	Page: 3/4	
Version 2	Date of issue 8 October 2007	Format Australia	Language ENGLISH
	Build 3.5.2	(Australia)	

16 . Other information

Key to abbreviations

AMP = Acceptable Maximum Peak
ACGIH = American Conference of Governmental Industrial Hygienists, an agency that promulgates exposure standards.
ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail
ADG Code = Australian Code for the Transport of Dangerous Goods by Road and Rail
CAS Number = Chemical Abstracts Service Registry Number
HAZCHEM Code = Emergency action code of numbers and letters which gives information to emergency services. Its use is required by the ADG Code for Dangerous Goods in bulk.
ICAO = International Civil Aviation Organization.
IATA = International Air Transport Association, the organization promulgating rules governing shipment of goods by air.
IMDG = International Maritime Organization Rules, rules governing shipment of goods by water.
IP 346 = A chemical screening assay for dermal toxicity. The European Commission has recommended that Method IP 346 be used as the basis for labelling certain lubricant oil base stocks for carcinogenicity. The EU Commission has stipulated that the classification as a carcinogen need not apply if it can be shown that the substance contains less than 3% DMSO extract as measured by IP 346. (See Note L, European Commission Directive 67/548/EEC as amended and adapted.) DMSO is a solvent.
NOHSC = National Occupational Health & Safety Commission, Australia
TWA = Time weighted average
STEL = Short term exposure limit
UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods.

History

Date of issue 08/10/2007.
Date of previous issue 12/04/2006.
Prepared by Product Stewardship

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from us.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken.

1. Identification of the material and supplier

Product name	Spheerol EPL 2
SDS no.	451356
Product use	Grease for industrial applications For specific application advice see appropriate Technical Data Sheet or consult our company representative.
Supplier	BP Australia Pty Ltd (ABN 53 004 085 616) Melbourne Central, 360 Elizabeth Street, Melbourne, Victoria 3000, Australia Tel: +61 (03) 9268 4111 Fax: +61 (03) 9268 3321
EMERGENCY TELEPHONE NUMBER	+61 29032 0460 (or 1800 14 14 74 within Australia)
OTHER PRODUCT INFORMATION	Technical Help Line 1 300 557 998 (Local Call)
Product code	451356-AU13

2. Hazards identification

Statement of hazardous/dangerous nature	NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.
--	---

3. Composition/information on ingredients

Highly refined base oil (IP 346 DMSO extract < 3%). Thickening agent. Proprietary performance additives.

This product does not contain any hazardous ingredients at or above regulated thresholds.

4. First-aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.
Skin contact	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops.
Inhalation	If inhaled, remove to fresh air. Get medical attention if symptoms appear.
Ingestion	Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If potentially dangerous quantities of this material have been swallowed, call a physician immediately.
Advice to doctor	Treatment should in general be symptomatic and directed to relieving any effects.

5. Fire-fighting measures

Extinguishing media	
Suitable	In case of fire, use water spray (fog), foam, dry chemical or CO ₂ .
Not suitable	Do not use water jet.
Hazardous decomposition products	Decomposition products may include the following materials: carbon dioxide carbon monoxide phosphorus oxides metal oxide/oxides
Unusual fire/explosion hazards	This material is not explosive as defined by established regulatory criteria.
Special fire-fighting procedures	None identified.

6 . Accidental release measures

Personal precautions	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment (see section 8).
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Large spill	Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.
Small spill	Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.

7 . Handling and storage

Handling	Wash thoroughly after handling. Avoid strong oxidisers.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area.

8 . Exposure controls/personal protection

Ingredient name	Occupational exposure limits
Base oil - unspecified	Safe Work Australia (Australia). TWA: 5 mg/m ³ 8 hour(s). Form: Oil mist, mineral

Whilst specific OELs for certain components are included in this SDS, it should be noted that other components of the preparation will be present in any mist, vapour or dust produced. For this reason, the specific OELs may not be applicable to the product and are provided for guidance purposes.

Biological Limit Values No biological limit allocated.

Exposure controls

Occupational exposure controls Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits.

Hygiene measures Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Personal protective equipment

Respiratory protection None required. However, use of adequate ventilation is good industrial practice.

Skin and body None required; however, use of protective clothing is good industrial practice.

Hand protection None required; however, use of gloves is good industrial practice.

Eye protection Safety glasses with side shields.

9 . Physical and chemical properties

Physical state	Grease
Colour	Brown. [Dark]
Odour	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Viscosity	Kinematic: 180 to 200 mm ² /s (180 to 200 cSt) at 40°C
pH	Not available.
Boiling point / range	Not available.
Melting point / range	Not available.
Relative density/Specific gravity	Not available.
Density	>1000 kg/m ³ (>1 g/cm ³) at 15°C
Solubility	insoluble in water.

10 . Stability and reactivity

Stability	The product is stable.
Conditions to avoid	Avoid extreme temperatures, strong oxidizers, fire.
Incompatibility with various substances/Hazardous Reactions	No hazardous reactions identified.
Hazardous decomposition products	Decomposition products may include the following materials: carbon dioxide carbon monoxide phosphorus oxides metal oxide/oxides

11 . Toxicological information

Effects and symptoms

Eyes	No significant health hazards identified.
Skin	No significant health hazards identified.
Inhalation	No significant health hazards identified.
Ingestion	No significant health hazards identified.

Chronic toxicity

Carcinogenic effects	No component of this product at levels greater than or equal to 0.1% is identified as a carcinogen by ACGIH, the International Agency for Research on Cancer (IARC), the European Commission (EC), or the National Occupational Health and Safety Commission (Australia).
Mutagenic effects	No known significant effects or critical hazards.

12 . Ecological information

Ecotoxicity	Not classified as environmentally hazardous in accordance with the 'Approved Criteria for Classifying Hazardous Substances' [NOHSC (1008)/2004 as amended and adapted].
Biodegradability	
Persistence/degradability	The biodegradability of this material has not been determined.

13 . Disposal considerations

Disposal considerations / Waste information	The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
Special Precautions for Landfill or Incineration	No additional special precautions identified.

14 . Transport information

International transport regulations

Not classified as dangerous for transport (ADG, IMDG, ICAO/IATA).

Special precautions for user	No known special precautions required. See Section: "Handling and storage" for additional information.
-------------------------------------	--

15 . Regulatory information

Standard for the Uniform Scheduling of Drugs and Poisons

Not regulated.

Control of Scheduled Carcinogenic Substances

Ingredient name

No Listed Substance

Schedule

Australia Regulations	Labelling requirements for SUSDP do not apply to a poison that is packed and sold solely for industrial, laboratory or manufacturing use. However, this product is labelled in accordance with NOSHC National Code of Practice for labelling of workplace substances.
Other regulations	
Europe inventory	Not determined.
United States inventory (TSCA 8b)	All components are listed or exempted.
Australia inventory (AICS)	All components are listed or exempted.

Canada inventory	All components are listed or exempted.
China inventory (IECSC)	All components are listed or exempted.
Japan inventory (ENCS)	At least one component is not listed.
Korea inventory (KECI)	All components are listed or exempted.
Philippines inventory (PICCS)	All components are listed or exempted.

16 . Other information

Key to abbreviations

AMP = Acceptable Maximum Peak
ACGIH = American Conference of Governmental Industrial Hygienists, an agency that promulgates exposure standards.
ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail
ADG Code = Australian Code for the Transport of Dangerous Goods by Road and Rail
CAS Number = Chemical Abstracts Service Registry Number
HAZCHEM Code = Emergency action code of numbers and letters which gives information to emergency services. Its use is required by the ADG Code for Dangerous Goods in bulk.
ICAO = International Civil Aviation Organization.
IATA = International Air Transport Association, the organization promulgating rules governing shipment of goods by air.
IMDG = International Maritime Organization Rules, rules governing shipment of goods by water.
IP 346 = A chemical screening assay for dermal toxicity. The European Commission has recommended that Method IP 346 be used as the basis for labelling certain lubricant oil base stocks for carcinogenicity. The EU Commission has stipulated that the classification as a carcinogen need not apply if it can be shown that the substance contains less than 3% DMSO extract as measured by IP 346. (See Note L, European Commission Directive 67/548/EEC as amended and adapted.) DMSO is a solvent.
NOHSC = National Occupational Health & Safety Commission, Australia
TWA = Time weighted average
STEL = Short term exposure limit
UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods.

History

Date of issue 25/08/2010.
Date of previous issue No previous validation.
Prepared by Product Stewardship

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from us.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken.

1. Identification of the material and supplier

Product name	Castrol Tecton HD 15W-40
SDS no.	465353
Product use	Diesel engine oil. For specific application advice see appropriate Technical Data Sheet or consult our company representative.
Supplier	BP Australia Pty Ltd (ABN 53 004 085 616) 717 Bourke Street Docklands VIC 3008 Australia Tel: +61 (03) 9268 4111 Fax: +61 (03) 9268 3321
EMERGENCY TELEPHONE NUMBER	+61 2801 44558 (or 1800 14 14 74 within Australia)
Product code	465353-AU07

2. Hazards identification

Statement of hazardous/dangerous nature	NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.
--	---

3. Composition/information on ingredients

Highly refined base oil (IP 346 DMSO extract < 3%). Proprietary performance additives.

This product does not contain any hazardous ingredients at or above regulated thresholds.

4. First-aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.
Skin contact	Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops.
Inhalation	If inhaled, remove to fresh air. Get medical attention if symptoms appear.
Ingestion	Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Advice to doctor	Treatment should in general be symptomatic and directed to relieving any effects.

5. Fire-fighting measures

Extinguishing media	
Suitable	In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray.
Not suitable	Do not use water jet.
Hazardous decomposition products	Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides phosphorus oxides metal oxide/oxides
Unusual fire/explosion hazards	In a fire or if heated, a pressure increase will occur and the container may burst.
Special fire-fighting procedures	No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.
Protection of fire-fighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

6. Accidental release measures

Personal precautions	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment (see Section 8).
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Large spill	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.
Small spill	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7. Handling and storage

Handling	Put on appropriate personal protective equipment (see Section 8).
Storage	Store and use only in equipment/containers designed for use with this product. Keep away from heat and direct sunlight. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10).
Combustibility Classification	Combustible liquid Class C2 (AS 1940).

8. Exposure controls/personal protection

Ingredient name	Occupational exposure limits
Base oil - unspecified	Safe Work Australia (Australia). TWA: 5 mg/m ³ 8 hour(s). Form: Oil mist, mineral

Whilst specific OELs for certain components are included in this SDS, it should be noted that other components of the preparation will be present in any mist, vapour or dust produced. For this reason, the specific OELs may not be applicable to the product and are provided for guidance purposes.

Biological Limit Values No biological limit allocated.

Exposure controls

Occupational exposure controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits. All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained. Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards. The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Respiratory protection

Avoid breathing of vapours, mists or spray. Select and use respirators in accordance with AS/NZS 1715/1716. When mists or vapours exceed the exposure standards then the use of the following is recommended: Approved respirator with organic vapour and dust/mist (Type P1) filters. Filter capacity and respirator type depends on exposure level.

Skin and body

Avoid prolonged or repeated contact with skin. Wear protective clothing if prolonged or repeated contact is likely.

Hand protection

Wear protective gloves if prolonged or repeated contact is likely. Chemical-resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Eye protection

Safety glasses with side shields.

9 . Physical and chemical properties

Physical state	Liquid.
Colour	Amber.
Odour	Mild Oily.
Flash point	230 °C (Open cup) Cleveland.
Vapour pressure	Not available.
Vapour density	Not available.
Viscosity	Kinematic: 130.6 mm ² /s (130.6 cSt) at 40°C Kinematic: 15.7 to 16.3 mm ² /s (15.7 to 16.3 cSt) at 100°C
pH	Not available.
Boiling point / range	Not available.
Melting point / range	Not available.
Pour point	-36 °C
Relative density/Specific gravity	Not available.
Density	873 kg/m ³ (0.873 g/cm ³) at 15°C
Solubility	insoluble in water.

10 . Stability and reactivity

Stability	The product is stable.
Conditions to avoid	Avoid extreme temperatures, strong oxidizers, fire.
Incompatibility with various substances/Hazardous Reactions	Reactive or incompatible with the following materials: oxidising materials.
Hazardous decomposition products	Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides phosphorus oxides metal oxide/oxides

11 . Toxicological information

Effects and symptoms

Eyes	No significant health hazards identified.
Skin	Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.
Inhalation	No significant health hazards identified.
Ingestion	No significant health hazards identified.

Chronic toxicity

Other chronic toxicity data	USED ENGINE OILS Combustion products resulting from the operation of internal combustion engines contaminate engine oils during use. Used engine oil may contain hazardous components which have the potential to cause skin cancer. Frequent or prolonged contact with all types and makes of used engine oil must therefore be avoided and a high standard of personal hygiene maintained.
Carcinogenic effects	No component of this product at levels greater than or equal to 0.1% is identified as a carcinogen by ACGIH, the International Agency for Research on Cancer (IARC), the European Commission (EC), or the National Occupational Health and Safety Commission (Australia).
Mutagenic effects	No known significant effects or critical hazards.

12 . Ecological information

Ecotoxicity	Not classified as environmentally hazardous in accordance with the 'Approved Criteria for Classifying Hazardous Substances' [NOHSC (1008)/2004 as amended and adapted].
Biodegradability	
Persistence/degradability	The biodegradability of this material has not been determined.

13 . Disposal considerations

Disposal considerations / Waste information	The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
--	---

14 . Transport information

International transport regulations

Not classified as dangerous for transport (ADG, IMDG, ICAO/IATA).

Special precautions for user No known special precautions required. See Section: "Handling and storage" for additional information.

15 . Regulatory information

Standard for the Uniform Scheduling of Medicines and Poisons

Not scheduled

Industrial Products - Labelling requirements for SUSMP do not apply to a poison that is packed and sold solely for industrial, laboratory or manufacturing use. However, this product is labelled in accordance with NOSH National Code of Practice for labelling of workplace substances.

Control of Scheduled Carcinogenic Substances

Ingredient name

No Listed Substance

Schedule

Other regulations

REACH Status	For the REACH status of this product please consult your company contact, as identified in Section 1.
United States inventory (TSCA 8b)	All components are listed or exempted.
Australia inventory (AICS)	All components are listed or exempted.
Canada inventory	All components are listed or exempted.
China inventory (IECSC)	All components are listed or exempted.
Japan inventory (ENCS)	All components are listed or exempted.
Korea inventory (KECI)	All components are listed or exempted.
Philippines inventory (PICCS)	All components are listed or exempted.

16 . Other information

Key to abbreviations

AMP = Acceptable Maximum Peak
ACGIH = American Conference of Governmental Industrial Hygienists, an agency that promulgates exposure standards.
ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail
ADG Code = Australian Code for the Transport of Dangerous Goods by Road and Rail
CAS Number = Chemical Abstracts Service Registry Number
HAZCHEM Code = Emergency action code of numbers and letters which gives information to emergency services. Its use is required by the ADG Code for Dangerous Goods in bulk.
ICAO = International Civil Aviation Organization.
IATA = International Air Transport Association, the organization promulgating rules governing shipment of goods by air.
IMDG = International Maritime Organization Rules, rules governing shipment of goods by water.
IP 346 = A chemical screening assay for dermal toxicity. The European Commission has recommended that Method IP 346 be used as the basis for labelling certain lubricant oil base stocks for carcinogenicity. The EU Commission has stipulated that the classification as a carcinogen need not apply if it can be shown that the substance contains less than 3% DMSO extract as measured by IP 346. (See Note L, European Commission Directive 67/548/EEC as amended and adapted.) DMSO is a solvent.
NOHSC = National Occupational Health & Safety Commission, Australia
TWA = Time weighted average
STEL = Short term exposure limit
UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods.

History

Date of issue	29/04/2011.
Date of previous issue	21/02/2011.
Prepared by	Product Stewardship

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from us.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to

adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken.

1. Identification of the material and supplier

Product name	EPX 85W-140
SDS #	450360
Product use	Automotive gear lubricant For specific application advice see appropriate Technical Data Sheet or consult our company representative.
Supplier	BP Australia Pty Ltd (ABN 53 004 085 616) Melbourne Central, 360 Elizabeth Street, Melbourne, Victoria 3000, Australia Tel: +61 (03) 9268 4111 Fax: +61 (03) 9268 3321
EMERGENCY TELEPHONE NUMBER	1800 638 556
Product code	450360-AU07

2. Hazards identification

Statement of hazardous/dangerous nature	NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.
Risk phrases	R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety phrases	S61- Avoid release to the environment. Refer to special instructions/safety data sheet.

3. Composition/information on ingredients

Highly refined base oil and additives

This product does not contain any hazardous ingredients at or above regulated thresholds.

4. First-aid measures

Eye contact	In case of contact, immediately flush eyes with a copious amount of water for at least 15 minutes. Get medical attention if irritation occurs.
Skin contact	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops.
Inhalation	If inhaled, remove to fresh air. Get medical attention if symptoms appear.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately.

5. Fire-fighting measures

Extinguishing media	
Suitable	Use foam or all-purpose dry chemicals to extinguish. This material is harmful to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Not Suitable	Do not use water jet.
Hazchem code	Decomposition products may include the following materials: carbon oxides
Unusual fire/explosion Hazards	This material is not explosive as defined by established regulatory criteria.
Special fire-fighting procedures	None identified.

6 . Accidental release measures

Personal precautions	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material.
Large spill	Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.
Small spill	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7 . Handling and storage

Handling	Avoid contact of spilled material and runoff with soil and surface waterways.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area.

8 . Exposure controls/personal protection

Ingredient name	Occupational exposure limits
Base oil - unspecified	NOHSC (Australia). TWA: 5 mg/m ³ 8 hour(s). Form: Oil mist, mineral

Whilst specific OELs for certain components are included in this SDS, it should be noted that other components of the preparation will be present in any mist, vapour or dust produced. For this reason, the specific OELs may not be applicable to the product and are provided for guidance purposes.

Biological Limit Values	No biological limit allocated.
Exposure controls	
Occupational exposure controls	Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.
Personal protective equipment	
Respiratory protection	Avoid breathing of vapours, mists or spray. Select and use respirators in accordance with AS/NZS 1715/1716. When mists or vapours exceed the exposure standards then the use of the following is recommended: Approved respirator with organic vapour and dust/mist (Type P1) filters. Filter capacity and respirator type depends on exposure level.
Skin and body	Wear protective clothing if prolonged or repeated contact is likely.
Hand protection	Wear protective gloves if prolonged or repeated contact is likely. Chemical resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.
Eye protection	Safety glasses with side shields.

9 . Physical and chemical properties

Physical state	Liquid.
Colour	Amber.
Odour	Odour [Strong]
Vapour pressure	Not available.
Vapour density	Not available.

Viscosity	Kinematic: 26 to 28 mm ² /s (26 to 28 cSt) at 100°C
pH	Not available.
Boiling point / range	Not available.
Melting point / range	Not available.
Relative density/Specific Gravity	Not available.
Density	905 kg/m ³ (0.905 g/cm ³) at 15°C
Solubility	Insoluble in water.

10 . Stability and reactivity

Stability	The product is stable.
Conditions to Avoid	Avoid extreme temperatures, strong oxidizers, fire.
Incompatibility with various substances/Hazardous Reactions	No hazardous reactions identified.
Hazardous Decomposition Products	Decomposition products may include the following materials: carbon oxides

11 . Toxicological information

Effects and symptoms

Eyes	Unlikely to cause more than transient stinging or redness if accidental eye contact occurs.
Skin	Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.
Inhalation	Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.
Ingestion	Unlikely to cause harm if accidentally swallowed in small doses, though larger quantities may cause nausea and diarrhoea.

Chronic toxicity

Carcinogenic effects	No component of this product at levels greater than or equal to 0.1% is identified as a carcinogen by ACGIH, the International Agency for Research on Cancer (IARC), the European Commission (EC), or the National Occupational Health and Safety Commission (Australia).
Mutagenic effects	No known significant effects or critical hazards.

12 . Ecological information

Ecotoxicity	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Biodegradability	
Persistence/degradability	The biodegradability of this material has not been determined.

13 . Disposal considerations

Disposal Consideration / Waste information	The generation of waste should be avoided or minimised wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Special Precautions for Landfill or Incineration	No additional special precautions identified.

14 . Transport information

International transport regulations

Not classified as dangerous for transport (ADG, IMDG, ICAO/IATA).

Special precautions for user No known special precautions required. See Section: "Handling and storage" for additional information.

15 . Regulatory information

Standard for the Uniform Scheduling of Drugs and Poisons

6

Control of Scheduled Carcinogenic Substances

Ingredient name

No Listed Substance

Schedule

Other regulations

Inventories

Europe inventory: All components are listed or exempted.

Product name EPX 85W-140	Product code 450360-AU07	Page: 3/4
Version 1	Date of issue 28 September 2007	Format Australia
	Build 3.5.2	Language ENGLISH
	(Australia)	

United States inventory (TSCA 8b): All components are listed or exempted.

Australia inventory (AICS): All components are listed or exempted.

Canada inventory: All components are listed or exempted.

China inventory (IECSC): All components are listed or exempted.

Japan inventory (ENCS): All components are listed or exempted.

Korea inventory (KECI): All components are listed or exempted.

Philippines inventory (PICCS): All components are listed or exempted.

16 . Other information

Key to abbreviations

AMP = Acceptable Maximum Peak

ACGIH = American Conference of Governmental Industrial Hygienists, an agency that promulgates exposure standards.

ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail

ADG Code = Australian Code for the Transport of Dangerous Goods by Road and Rail

CAS Number = Chemical Abstracts Service Registry Number

HAZCHEM Code = Emergency action code of numbers and letters which gives information to emergency services. Its use is required by the ADG Code for Dangerous Goods in bulk.

ICAO = International Civil Aviation Organization.

IATA = International Air Transport Association, the organization promulgating rules governing shipment of goods by air.

IMDG = International Maritime Organization Rules, rules governing shipment of goods by water.

IP 346 = A chemical screening assay for dermal toxicity. The European Commission has recommended that Method IP 346 be used as the basis for labelling certain lubricant oil base stocks for carcinogenicity. The EU Commission has stipulated that the classification as a carcinogen need not apply if it can be shown that the substance contains less than 3% DMSO extract as measured by IP 346. (See Note L, European Commission Directive 67/548/EEC as amended and adapted.) DMSO is a solvent.

NOHSC = National Occupational Health & Safety Commission, Australia

TWA = Time weighted average

STEL = Short term exposure limit

UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods.

History

Date of issue 28/09/2007.

Date of previous issue 27/09/2007.

Prepared by Product Stewardship

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from us.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken.

1. Identification of the material and supplier

Product name	Hyspin AWS 68
SDS no.	456618
Product use	Hydraulic fluid For specific application advice see appropriate Technical Data Sheet or consult our company representative.
Supplier	BP Australia Pty Ltd (ABN 53 004 085 616) Melbourne Central, 360 Elizabeth Street, Melbourne, Victoria 3000, Australia Tel: +61 (03) 9268 4111 Fax: +61 (03) 9268 3321
EMERGENCY TELEPHONE NUMBER	+61 29032 0460 (or 1800 14 14 74 within Australia)
OTHER PRODUCT INFORMATION	Technical Help Line 1 300 557 998 (Local Call)
Product code	456618-AU07

2. Hazards identification

Statement of hazardous/dangerous nature	NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.
--	---

3. Composition/information on ingredients

Highly refined base oil (IP 346 DMSO extract < 3%). Proprietary performance additives.

This product does not contain any hazardous ingredients at or above regulated thresholds.

4. First-aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.
Skin contact	Immediately wash exposed skin with soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops.
Inhalation	If inhaled, remove to fresh air. Get medical attention if symptoms appear.
Ingestion	Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If potentially dangerous quantities of this material have been swallowed, call a physician immediately.
Advice to doctor	Treatment should in general be symptomatic and directed to relieving any effects.

Note: High Pressure Applications
Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discoloured and extremely painful with extensive subcutaneous necrosis. Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimise tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes.

5. Fire-fighting measures

Extinguishing media	
Suitable	In case of fire, use water fog, foam, dry chemical or carbon dioxide extinguisher or spray.
Not suitable	Do not use water jet.
Hazardous decomposition products	Decomposition products may include the following materials: carbon dioxide carbon monoxide

Unusual fire/explosion hazards

This material is not explosive as defined by established regulatory criteria.

Special fire-fighting procedures

None identified.

Protection of fire-fighters

Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

6 . Accidental release measures**Personal precautions**

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment (see section 8).

Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Large spill

Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Small spill

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7 . Handling and storage**Handling**

Avoid prolonged or repeated contact with skin. Wash thoroughly after handling.

Storage

Keep container tightly closed. Keep container in a cool, well-ventilated area.

Combustibility Classification

Combustible liquid Class C2 (AS 1940).

8 . Exposure controls/personal protection**Ingredient name**

Base oil - unspecified

Occupational exposure limits**NOHSC (Australia).**TWA: 5 mg/m³ 8 hour(s). Form: Oil mist, mineral

Whilst specific OELs for certain components are included in this SDS, it should be noted that other components of the preparation will be present in any mist, vapour or dust produced. For this reason, the specific OELs may not be applicable to the product and are provided for guidance purposes.

Biological Limit Values

No biological limit allocated.

Exposure controls**Occupational exposure controls**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits.

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Personal protective equipment**Respiratory protection**

Avoid breathing of vapours, mists or spray. Select and use respirators in accordance with AS/NZS 1715/1716. When mists or vapours exceed the exposure standards then the use of the following is recommended: Approved respirator with organic vapour and dust/mist (Type P1) filters. Filter capacity and respirator type depends on exposure level.

Skin and body

Avoid prolonged or repeated contact with skin. Wear protective clothing if prolonged or repeated contact is likely.

Hand protection

Wear protective gloves if prolonged or repeated contact is likely. Chemical-resistant gloves. Recommended: Nitrile gloves.

The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Eye protection

Safety glasses with side shields.

9 . Physical and chemical properties

Physical state	Liquid.
Colour	Amber. [Light]
Odour	Not available.
Flash point	227 °C (Open cup) Cleveland.
Vapour pressure	Not available.
Vapour density	Not available.
Viscosity	Kinematic: 68 mm ² /s (68 cSt) at 40°C Kinematic: 8.6 mm ² /s (8.6 cSt) at 100°C
pH	Not available.
Boiling point / range	Not available.
Melting point / range	Not available.
Pour point	-21 °C
Relative density/Specific gravity	Not available.
Density	859 kg/m ³ (0.859 g/cm ³) at 15°C
Solubility	insoluble in water.

10 . Stability and reactivity

Stability	The product is stable.
Conditions to avoid	Avoid extreme temperatures, strong oxidizers, fire.
Incompatibility with various substances/Hazardous Reactions	Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products	Decomposition products may include the following materials: carbon dioxide carbon monoxide

11 . Toxicological information

Effects and symptoms	
Eyes	No significant health hazards identified.
Skin	Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.
Inhalation	No significant health hazards identified.
Ingestion	No significant health hazards identified.
Chronic toxicity	
Carcinogenic effects	No component of this product at levels greater than or equal to 0.1% is identified as a carcinogen by ACGIH, the International Agency for Research on Cancer (IARC), the European Commission (EC), or the National Occupational Health and Safety Commission (Australia).
Mutagenic effects	No known significant effects or critical hazards.

12 . Ecological information

Ecotoxicity	Not classified as environmentally hazardous in accordance with the 'Approved Criteria for Classifying Hazardous Substances' [NOHSC (1008)/2004 as amended and adapted].
Biodegradability	
Persistence/degradability	The biodegradability of this material has not been determined.

13 . Disposal considerations

Disposal considerations / Waste information	The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
Special Precautions for Landfill or Incineration	No additional special precautions identified.

14 . Transport information

International transport regulations

Not classified as dangerous for transport (ADG, IMDG, ICAO/IATA).

Special precautions for user No known special precautions required. See Section: "Handling and storage" for additional information.

15 . Regulatory information

Standard for the Uniform Scheduling of Drugs and Poisons

Not regulated.

Control of Scheduled Carcinogenic Substances

Ingredient name

Schedule

No Listed Substance

Other regulations

Europe inventory All components are listed or exempted.

United States inventory (TSCA 8b) All components are listed or exempted.

Australia inventory (AICS) All components are listed or exempted.

Canada inventory All components are listed or exempted.

China inventory (IECSC) All components are listed or exempted.

Japan inventory (ENCS) All components are listed or exempted.

Korea inventory (KECI) All components are listed or exempted.

Philippines inventory (PICCS) All components are listed or exempted.

16 . Other information

Key to abbreviations

AMP = Acceptable Maximum Peak

ACGIH = American Conference of Governmental Industrial Hygienists, an agency that promulgates exposure standards.

ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail

ADG Code = Australian Code for the Transport of Dangerous Goods by Road and Rail

CAS Number = Chemical Abstracts Service Registry Number

HAZCHEM Code = Emergency action code of numbers and letters which gives information to emergency services. Its use is required by the ADG Code for Dangerous Goods in bulk.

ICAO = International Civil Aviation Organization.

IATA = International Air Transport Association, the organization promulgating rules governing shipment of goods by air.

IMDG = International Maritime Organization Rules, rules governing shipment of goods by water.

IP 346 = A chemical screening assay for dermal toxicity. The European Commission has recommended that Method IP 346 be used as the basis for labelling certain lubricant oil base stocks for carcinogenicity. The EU Commission has stipulated that the classification as a carcinogen need not apply if it can be shown that the substance contains less than 3% DMSO extract as measured by IP 346. (See Note L, European Commission Directive 67/548/EEC as amended and adapted.) DMSO is a solvent.

NOHSC = National Occupational Health & Safety Commission, Australia

TWA = Time weighted average

STEL = Short term exposure limit

UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods.

History

Date of issue 19/08/2009.

Date of previous issue 27/08/2007.

Prepared by Product Stewardship

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from us.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet

and of any precautions that should be taken.

Product name Hyspin AWS 68

Version 2

Date of issue 19 August 2009

Product code 456618-AU07

Format Australia
(Australia)

Page: 5/5

Language ENGLISH
(ENGLISH)

1. Identification of the material and supplier

Product name	Castrol TQ-DIII
SDS no.	465318
Product use	Automatic transmission fluid. For specific application advice see appropriate Technical Data Sheet or consult our company representative.
Supplier	BP Australia Pty Ltd (ABN 53 004 085 616) Melbourne Central, 360 Elizabeth Street, Melbourne, Victoria 3000, Australia Tel: +61 (03) 9268 4111 Fax: +61 (03) 9268 3321
EMERGENCY TELEPHONE NUMBER	+61 29032 0460 (or 1800 14 14 74 within Australia)
Product code	465318-MY01

2. Hazards identification

Statement of hazardous/dangerous nature	NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.
--	---

3. Composition/information on ingredients

Highly refined base oil (IP 346 DMSO extract < 3%). Proprietary performance additives.

This product does not contain any hazardous ingredients at or above regulated thresholds.

4. First-aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.
Skin contact	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops.
Inhalation	If inhaled, remove to fresh air. Get medical attention if symptoms appear.
Ingestion	Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If potentially dangerous quantities of this material have been swallowed, call a physician immediately.
Advice to doctor	Treatment should in general be symptomatic and directed to relieving any effects.

5. Fire-fighting measures

Extinguishing media	
Suitable	In case of fire, use water fog, foam, dry chemical or carbon dioxide extinguisher or spray.
Not suitable	Do not use water jet.
Hazardous decomposition products	Decomposition products may include the following materials: carbon dioxide carbon monoxide
Unusual fire/explosion hazards	This material is not explosive as defined by established regulatory criteria.
Special fire-fighting procedures	None identified.
Protection of fire-fighters	Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

6 . Accidental release measures

Personal precautions	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment (see section 8).
Environmental precautions	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Large spill	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.
Small spill	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7 . Handling and storage

Handling	Wash thoroughly after handling. Avoid strong oxidisers.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area.
Combustibility Classification	Combustible liquid Class C2 (AS 1940).

8 . Exposure controls/personal protection

Ingredient name	Occupational exposure limits
Base oil - unspecified	NOHSC (Australia). TWA: 5 mg/m ³ 8 hour(s). Form: Oil mist, mineral

Whilst specific OELs for certain components are included in this SDS, it should be noted that other components of the preparation will be present in any mist, vapour or dust produced. For this reason, the specific OELs may not be applicable to the product and are provided for guidance purposes.

Biological Limit Values No biological limit allocated.

Exposure controls

Occupational exposure controls Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits.

Hygiene measures Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Personal protective equipment

Respiratory protection Avoid breathing of vapours, mists or spray. Select and use respirators in accordance with AS/NZS 1715/1716. When mists or vapours exceed the exposure standards then the use of the following is recommended: Approved respirator with organic vapour and dust/mist filters. Filter capacity and respirator type depends on exposure level.

Skin and body None required; however, use of protective clothing is good industrial practice.

Hand protection Wear protective gloves if prolonged or repeated contact is likely. Chemical-resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Eye protection Safety glasses with side shields.

9 . Physical and chemical properties

Physical state	Liquid.
Colour	Red.
Odour	Mild
Flash point	185 °C (Closed cup) Pensky-Martens.
Vapour pressure	Not available.
Vapour density	Not available.
Viscosity	Kinematic: 36 mm ² /s (36 cSt) at 40°C Kinematic: 7.2 mm ² /s (7.2 cSt) at 100°C
pH	Not available.
Boiling point / range	Not available.

Product name Castrol TQ-DIII

Product code 465318-MY01

Page: 2/4

Version 1

Date of issue 7 April 2010

Format Australia
(Australia)

Language ENGLISH
(ENGLISH)

Melting point / range	Not available.
Pour point	-51 °C
Relative density/Specific gravity	Not available.
Density	859.7 kg/m ³ (0.86 g/cm ³) at 30°C
Solubility	insoluble in water.

10 . Stability and reactivity

Stability	The product is stable.
Conditions to avoid	Avoid extreme temperatures, strong oxidizers, fire.
Incompatibility with various substances/Hazardous Reactions	Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products	Decomposition products may include the following materials: carbon dioxide carbon monoxide

11 . Toxicological information

Effects and symptoms

Eyes	No significant health hazards identified.
Skin	No significant health hazards identified.
Inhalation	No significant health hazards identified.
Ingestion	No significant health hazards identified.

Chronic toxicity

Carcinogenic effects	No component of this product at levels greater than or equal to 0.1% is identified as a carcinogen by ACGIH, the International Agency for Research on Cancer (IARC), the European Commission (EC), or the National Occupational Health and Safety Commission (Australia).
Mutagenic effects	No known significant effects or critical hazards.

12 . Ecological information

Ecotoxicity	Not classified as environmentally hazardous in accordance with the 'Approved Criteria for Classifying Hazardous Substances' [NOHSC (1008)/2004 as amended and adapted].
Biodegradability	
Persistence/degradability	The biodegradability of this material has not been determined.

13 . Disposal considerations

Disposal considerations / Waste information	The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
Special Precautions for Landfill or Incineration	No additional special precautions identified.

14 . Transport information

International transport regulations

Not classified as dangerous for transport (ADG, IMDG, ICAO/IATA).

Special precautions for user	No known special precautions required. See Section: "Handling and storage" for additional information.
-------------------------------------	--

15 . Regulatory information

Standard for the Uniform Scheduling of Drugs and Poisons

Not regulated.

Control of Scheduled Carcinogenic Substances

Ingredient name

No Listed Substance

[Schedule](#)

Other regulations

Europe inventory	All components are listed or exempted.
-------------------------	--

Product name Castrol TQ-DIII

Product code 465318-MY01

Page: 3/4

Version 1 **Date of issue** 7 April 2010

Format Australia
(Australia)

Language ENGLISH
(ENGLISH)

United States inventory (TSCA 8b)	All components are listed or exempted.
Australia inventory (AICS)	All components are listed or exempted.
Canada inventory	All components are listed or exempted.
China inventory (IECSC)	All components are listed or exempted.
Japan inventory (ENCS)	All components are listed or exempted.
Korea inventory (KECI)	All components are listed or exempted.
Philippines inventory (PICCS)	All components are listed or exempted.

16 . Other information

Key to abbreviations

AMP = Acceptable Maximum Peak
 ACGIH = American Conference of Governmental Industrial Hygienists, an agency that promulgates exposure standards.
 ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail
 ADG Code = Australian Code for the Transport of Dangerous Goods by Road and Rail
 CAS Number = Chemical Abstracts Service Registry Number
 HAZCHEM Code = Emergency action code of numbers and letters which gives information to emergency services. Its use is required by the ADG Code for Dangerous Goods in bulk.
 ICAO = International Civil Aviation Organization.
 IATA = International Air Transport Association, the organization promulgating rules governing shipment of goods by air.
 IMDG = International Maritime Organization Rules, rules governing shipment of goods by water.
 IP 346 = A chemical screening assay for dermal toxicity. The European Commission has recommended that Method IP 346 be used as the basis for labelling certain lubricant oil base stocks for carcinogenicity. The EU Commission has stipulated that the classification as a carcinogen need not apply if it can be shown that the substance contains less than 3% DMSO extract as measured by IP 346. (See Note L, European Commission Directive 67/548/EEC as amended and adapted.) DMSO is a solvent.
 NOHSC = National Occupational Health & Safety Commission, Australia
 TWA = Time weighted average
 STEL = Short term exposure limit
 UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods.

History

Date of issue 07/04/2010.
Date of previous issue No previous validation.
Prepared by Product Stewardship

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from us.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken.

1. Identification of the material and supplier

Product name	Castrol Transynd
SDS no.	455936
Historic SDS no.	0000001591, 455936-US10
Product use	Automatic transmission fluid. For specific application advice see appropriate Technical Data Sheet or consult our company representative.
Supplier	BP Australia Pty Ltd (ABN 53 004 085 616) Melbourne Central, 360 Elizabeth Street, Melbourne, Victoria 3000, Australia Tel: +61 (03) 9268 4111 Fax: +61 (03) 9268 3321
EMERGENCY TELEPHONE NUMBER	+61 29032 0460 (or 1800 14 14 74 within Australia)
Product code	455936-US03 US65

2. Hazards identification

Statement of hazardous/dangerous nature	NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.
Risk phrases	R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety phrases	S61- Avoid release to the environment. Refer to special instructions/safety data sheet.

3. Composition/information on ingredients

Synthetic base stock. Highly refined base oil (IP 346 DMSO extract < 3%). Proprietary performance additives.

This product does not contain any hazardous ingredients at or above regulated thresholds.

4. First-aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.
Skin contact	Immediately wash exposed skin with soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops.
Inhalation	If inhaled, remove to fresh air. Get medical attention if symptoms appear.
Ingestion	Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If potentially dangerous quantities of this material have been swallowed, call a physician immediately.

5. Fire-fighting measures

Extinguishing media	
Suitable	Use foam or all-purpose dry chemical to extinguish. This material is harmful to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Not suitable	Do not use water jet.
Hazardous decomposition products	Decomposition products may include the following materials: carbon dioxide carbon monoxide
Unusual fire/explosion hazards	This material is not explosive as defined by established regulatory criteria.
Special fire-fighting procedures	None identified.

6 . Accidental release measures

Personal precautions	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material.
Large spill	Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.
Small spill	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7 . Handling and storage

Handling	Avoid prolonged or repeated contact with skin. Avoid contact of spilled material and runoff with soil and surface waterways. Wash thoroughly after handling.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area.
Combustibility Classification	Combustible liquid Class C2 (AS 1940).

8 . Exposure controls/personal protection

Ingredient name	Occupational exposure limits
Base oil - unspecified	NOHSC (Australia). TWA: 5 mg/m ³ 8 hour(s). Form: Oil mist, mineral

Whilst specific OELs for certain components are included in this SDS, it should be noted that other components of the preparation will be present in any mist, vapour or dust produced. For this reason, the specific OELs may not be applicable to the product and are provided for guidance purposes.

Biological Limit Values No biological limit allocated.

Exposure controls

Occupational exposure controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits.

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Personal protective equipment

Respiratory protection

Avoid breathing of vapours, mists or spray. Select and use respirators in accordance with AS/NZS 1715/1716. When mists or vapours exceed the exposure standards then the use of the following is recommended: Approved respirator with organic vapour and dust/mist (Type P1) filters. Filter capacity and respirator type depends on exposure level.

Skin and body

Avoid prolonged or repeated contact with skin. Wear protective clothing if prolonged or repeated contact is likely.

Hand protection

Wear protective gloves if prolonged or repeated contact is likely. Chemical-resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Eye protection

Safety glasses with side shields.

9 . Physical and chemical properties

Physical state	Liquid.
Colour	Red.
Odour	Mild
Flash point	243 °C (Closed cup) Pensky-Martens.
Explosive properties	Non-explosive in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and shocks and mechanical impacts.
Vapour pressure	Not available.
Vapour density	Not available.
Viscosity	Kinematic: 38.9 mm ² /s (38.9 cSt) at 40°C Kinematic: 7.3 mm ² /s (7.3 cSt) at 100°C
pH	Not available.
Boiling point / range	Not available.
Melting point / range	Not available.
Pour point	-55 °C
Relative density/Specific gravity	0.85
Solubility	insoluble in water.

10 . Stability and reactivity

Stability	The product is stable.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame).
Incompatibility with various substances/Hazardous Reactions	Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products	Decomposition products may include the following materials: carbon dioxide carbon monoxide

11 . Toxicological information

Effects and symptoms

Eyes	No significant health hazards identified.
Skin	Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.
Inhalation	No significant health hazards identified.
Ingestion	No significant health hazards identified.

Chronic toxicity

Carcinogenic effects	No component of this product at levels greater than or equal to 0.1% is identified as a carcinogen by ACGIH, the International Agency for Research on Cancer (IARC), the European Commission (EC), or the National Occupational Health and Safety Commission (Australia).
Mutagenic effects	No known significant effects or critical hazards.

12 . Ecological information

Ecotoxicity	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Biodegradability	
Persistence/degradability	The biodegradability of this material has not been determined.

13 . Disposal considerations

Disposal considerations / Waste information	The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
Special Precautions for Landfill or Incineration	No additional special precautions identified.

14 . Transport information

International transport regulations

Not classified as dangerous for transport (ADG, IMDG, ICAO/IATA).

Special precautions for user No known special precautions required. See Section: "Handling and storage" for additional information.

15 . Regulatory information

Standard for the Uniform Scheduling of Drugs and Poisons

Not regulated.

Control of Scheduled Carcinogenic Substances

Ingredient name

Schedule

No Listed Substance

Other regulations

Europe inventory	All components are listed or exempted.
United States inventory (TSCA 8b)	All components are listed or exempted.
Australia inventory (AICS)	All components are listed or exempted.
Canada inventory	All components are listed or exempted.
China inventory (IECSC)	At least one component is not listed.
Japan inventory (ENCS)	Not determined.
Korea inventory (KECI)	All components are listed or exempted.
Philippines inventory (PICCS)	Not determined.

16 . Other information

Key to abbreviations

AMP = Acceptable Maximum Peak
ACGIH = American Conference of Governmental Industrial Hygienists, an agency that promulgates exposure standards.
ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail
ADG Code = Australian Code for the Transport of Dangerous Goods by Road and Rail
CAS Number = Chemical Abstracts Service Registry Number
HAZCHEM Code = Emergency action code of numbers and letters which gives information to emergency services. Its use is required by the ADG Code for Dangerous Goods in bulk.
ICAO = International Civil Aviation Organization.
IATA = International Air Transport Association, the organization promulgating rules governing shipment of goods by air.
IMDG = International Maritime Organization Rules, rules governing shipment of goods by water.
IP 346 = A chemical screening assay for dermal toxicity. The European Commission has recommended that Method IP 346 be used as the basis for labelling certain lubricant oil base stocks for carcinogenicity. The EU Commission has stipulated that the classification as a carcinogen need not apply if it can be shown that the substance contains less than 3% DMSO extract as measured by IP 346. (See Note L, European Commission Directive 67/548/EEC as amended and adapted.) DMSO is a solvent.
NOHSC = National Occupational Health & Safety Commission, Australia
TWA = Time weighted average
STEL = Short term exposure limit
UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods.

History

Date of issue	08/10/2009.
Date of previous issue	No previous validation.
Prepared by	Product Stewardship

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from us.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet

Product name Castrol Transynd	Product code 455936-US03 US65	Page: 4/5
Version 1	Date of issue 8 October 2009	Format Australia (Australia)
		Language ENGLISH (ENGLISH)

and of any precautions that should be taken.

Product name Castrol Transynd

Product code 455936-US03 US65 Page: 5/5

Version 1 **Date of issue** 8 October 2009

Format Australia
(Australia)

Language ENGLISH
(ENGLISH)

1. Identification of the material and supplier

Product name	Antifreeze-Antiboil
SDS #	462330
Product use	Coolant and antifreeze. For specific application advice see appropriate Technical Data Sheet or consult our company representative.
Supplier	BP Australia Pty Ltd (ABN 53 004 085 616) Melbourne Central, 360 Elizabeth Street, Melbourne, Victoria 3000, Australia Tel: +61 (03) 9268 4111 Fax: +61 (03) 9268 3321
EMERGENCY TELEPHONE NUMBER	1800 638 556
Product code	462330-AU10

2. Hazards identification

Statement of hazardous/dangerous nature	HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.
Risk phrases	R22- Harmful if swallowed.
Safety phrases	S2- Keep out of the reach of children. S46- If swallowed, seek medical advice immediately and show this container or label.

3. Composition/information on ingredients

Ingredient name	CAS no.	%
Ethylene glycol; ethanediol	107-21-1	50 - 100

This product also contains approximately 10 ppm of bittering agent, denatonium benzoate.

4. First-aid measures

Eye contact	In case of contact, immediately flush eyes with a copious amount of water for at least 15 minutes. Get medical attention if irritation occurs.
Skin contact	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops.
Inhalation	If inhaled, remove to fresh air. Get medical attention if symptoms appear.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately.

5. Fire-fighting measures

Extinguishing Media	
Suitable	In case of fire, use water fog, foam, dry chemical or carbon dioxide extinguisher or spray.
Hazards from combustion products	These products are carbon oxides nitrogen oxides
Unusual fire/explosion Hazards	This material is not explosive as defined by established regulatory criteria.
Special fire-fighting procedures	None identified.

6 . Accidental release measures

Emergency Procedures

Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (See Section: "Exposure controls/personal protection"). Follow all fire fighting procedures (See Section: "Fire-fighting measures").

Methods and materials for containment and clean-up

If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Avoid contact of spilt material with soil and prevent runoff entering surface waterways. See Section 13 for Waste Disposal Information.

7 . Handling and storage

Handling

Do not ingest. Wash thoroughly after handling.

Storage

Keep container tightly closed. Keep container in a cool, well-ventilated area.

Combustibility Classification

Combustible liquid Class C1 (AS 1940).

8 . Exposure controls/personal protection

Ingredient name

Ethylene glycol; ethanediol

Occupational exposure limits

NOHSC (Australia, 8/2005). Skin

STEL: 104 mg/m³ 15 minute(s). Form: Vapor

STEL: 40 ppm 15 minute(s). Form: Vapor

TWA: 10 mg/m³ 8 hour(s). Form: Particulate

TWA: 52 mg/m³ 8 hour(s). Form: Vapor

TWA: 20 ppm 8 hour(s). Form: Vapor

Whilst specific OELs for certain components are included in this SDS, it should be noted that other components of the preparation will be present in any mist, vapour or dust produced. For this reason, the specific OELs may not be applicable to the product and are provided for guidance purposes.

Biological Limit Values

No biological limit allocated.

Control Measures

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Personal protective equipment

Respiratory system

None required; however, use of adequate ventilation is good industrial practice.

Skin and body

None required; however, use of protective clothing is good industrial practice.

Hands

Wear gloves that cannot be penetrated by chemicals or oil. Chemical resistant gloves. Recommended: Nitrile gloves.

The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Eyes

Safety glasses with side shields.

9 . Physical and chemical properties

Physical state

Liquid.

Colour

Green.

Odour

Mild

Boiling point / range

160°C (320°F)

Melting point / range

Not available.

Density

1160 kg/m³ (1.16 g/cm³) at 20°C

Vapour density

Not available.

Vapour pressure

0.001 kPa (0.01 mm Hg) at 20°C

Solubility

Not available.

pH

8.5 (Basic.) at 50%

10 . Stability and reactivity

Stability	The product is stable.
Conditions to Avoid	Avoid extreme temperatures, strong oxidizers, fire.
Incompatibility with various substances/Hazardous Reactions	No hazardous reactions identified.
Hazardous Decomposition Products	These products are carbon oxides nitrogen oxides

11 . Toxicological information

Effects and symptoms

Eyes	Unlikely to cause more than transient stinging or redness if accidental eye contact occurs.
Skin	No significant health hazards identified.
Inhalation	No significant health hazards identified.
Ingestion	Harmful if swallowed.

Chronic toxicity

Carcinogenic effects	No component of this product at levels greater than or equal to 0.1% is identified as a carcinogen by ACGIH, the International Agency for Research on Cancer (IARC), the European Commission (EC), or the National Occupational Health and Safety Commission (Australia).
-----------------------------	---

12 . Ecological information

Ecotoxicity	Not classified as environmentally hazardous in accordance with the 'Approved Criteria for Classifying Hazardous Substances' [NOHSC (1008)/2004 as amended and adapted].
Biodegradability	
Persistence/degradability	The biodegradability of this material has not been determined.

13 . Disposal considerations

Disposal Consideration / Waste information	Avoid contact of spilled material and runoff with soil and surface waterways. Consult an environmental professional to determine if local, regional or national regulations would classify spilled or contaminated materials as hazardous waste. Use only approved transporters, recyclers, treatment, storage or disposal facilities. Dispose of in accordance with all applicable local and national regulations.
Special Precautions for Landfill or Incineration	No additional special precautions identified.

14 . Transport information

Not classified as dangerous for transport (ADG, IMDG, ICAO/IATA).

Special precautions for user	No known special precautions required. See Section: "Handling and storage" for additional information.
-------------------------------------	--

15 . Regulatory information

Standard for the Uniform Scheduling of Drugs and Poisons

5

This material is a scheduled poison and must be stored, maintained and used in accordance with the relevant regulations.

Control of Scheduled Carcinogenic Substances

Ingredient name

No Listed Substance

Schedule

Other Classification Information

Australia Regulations	Labelling requirements for SUSDP do not apply to a poison that is packed and sold solely for industrial, laboratory or manufacturing use. However, this product is labelled in accordance with NOSHC National Code of Practice for labelling of workplace substances.
Other regulations Inventories	Europe inventory: Not determined. United States inventory (TSCA 8b): Not determined. Australia inventory (AICS): All components are listed or exempted. Canada inventory: Not determined.

China inventory (IECSC): Not determined.

Japan inventory (ENCS): Not determined.

Korea inventory (KECI): All components are listed or exempted.

Philippines inventory (PICCS): Not determined.

16 . Other information

Key to abbreviations

AMP = Acceptable Maximum Peak

ACGIH = American Conference of Governmental Industrial Hygienists, an agency that promulgates exposure standards.

ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail

ADG Code = Australian Code for the Transport of Dangerous Goods by Road and Rail

CAS Number = Chemical Abstracts Service Registry Number

HAZCHEM Code = Emergency action code of numbers and letters which gives information to emergency services. Its use is required by the ADG Code for Dangerous Goods in bulk.

ICAO = International Civil Aviation Organization.

IATA = International Air Transport Association, the organization promulgating rules governing shipment of goods by air.

IMDG = International Maritime Organization Rules, rules governing shipment of goods by water.

IP 346 = A chemical screening assay for dermal toxicity. The European Commission has recommended that Method IP 346 be used as the basis for labelling certain lubricant oil base stocks for carcinogenicity. The EU Commission has stipulated that the classification as a carcinogen need not apply if it can be shown that the substance contains less than 3% DMSO extract as measured by IP 346. (See Note L, European Commission Directive 67/548/EEC as amended and adapted.) DMSO is a solvent.

NOHSC = National Occupational Health & Safety Commission, Australia

TWA = Time weighted average

STEL = Short term exposure limit

UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods.

History

Date of issue 26/06/2007.

Date of previous issue 03/04/2007.

Prepared by Product Stewardship

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from us.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken.

1. Identification of the material and supplier

Product name	Alpha SP 320
SDS no.	456557
Product use	Gear lubricant For specific application advice see appropriate Technical Data Sheet or consult our company representative.
Supplier	BP Australia Pty Ltd (ABN 53 004 085 616) Melbourne Central, 360 Elizabeth Street, Melbourne, Victoria 3000, Australia Tel: +61 (03) 9268 4111 Fax: +61 (03) 9268 3321
EMERGENCY TELEPHONE NUMBER	+61 29032 0460 (or 1800 14 14 74 within Australia)
OTHER PRODUCT INFORMATION	Technical Help Line 1 300 557 998 (Local Call)
Product code	456557-AU07

2. Hazards identification

Statement of hazardous/dangerous nature	NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.
--	---

3. Composition/information on ingredients

Highly refined base oil (IP 346 DMSO extract < 3%). Proprietary performance additives.

This product does not contain any hazardous ingredients at or above regulated thresholds.

4. First-aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.
Skin contact	Immediately wash exposed skin with soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops.
Inhalation	If inhaled, remove to fresh air. Get medical attention if symptoms appear.
Ingestion	Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If potentially dangerous quantities of this material have been swallowed, call a physician immediately.
Advice to doctor	Treatment should in general be symptomatic and directed to relieving any effects.

5. Fire-fighting measures

Extinguishing media	
Suitable	In case of fire, use water fog, foam, dry chemical or carbon dioxide extinguisher or spray.
Not suitable	Do not use water jet.
Hazardous decomposition products	Decomposition products may include the following materials: carbon dioxide carbon monoxide
Unusual fire/explosion hazards	This material is not explosive as defined by established regulatory criteria.
Special fire-fighting procedures	None identified.
Protection of fire-fighters	Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

6. Accidental release measures

Personal precautions	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment (see section 8).
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Large spill	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.
Small spill	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7. Handling and storage

Handling	Avoid prolonged or repeated contact with skin. Wash thoroughly after handling.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area.
Combustibility Classification	Combustible liquid Class C2 (AS 1940).

8. Exposure controls/personal protection

Ingredient name	Occupational exposure limits
Base oil - unspecified	NOHSC (Australia). TWA: 5 mg/m ³ 8 hour(s). Form: Oil mist, mineral

Whilst specific OELs for certain components are included in this SDS, it should be noted that other components of the preparation will be present in any mist, vapour or dust produced. For this reason, the specific OELs may not be applicable to the product and are provided for guidance purposes.

Biological Limit Values No biological limit allocated.

Exposure controls

Occupational exposure controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits.
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Personal protective equipment

Respiratory protection	Avoid breathing of vapours, mists or spray. Select and use respirators in accordance with AS/NZS 1715/1716. When mists or vapours exceed the exposure standards then the use of the following is recommended: Approved respirator with organic vapour and dust/mist (Type P1) filters. Filter capacity and respirator type depends on exposure level.
Skin and body	Avoid prolonged or repeated contact with skin. Wear protective clothing if prolonged or repeated contact is likely.
Hand protection	Wear protective gloves if prolonged or repeated contact is likely. Chemical-resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.
Eye protection	Safety glasses with side shields.

9. Physical and chemical properties

Physical state	Liquid.
Colour	Amber. [Light]
Odour	Not available.
Flash point	226 °C (Closed cup) Pensky-Martens.
Vapour pressure	Not available.
Vapour density	Not available.
Viscosity	Kinematic: 320 mm ² /s (320 cSt) at 40°C Kinematic: 24 mm ² /s (24 cSt) at 100°C
pH	Not available.

Boiling point / range	Not available.
Melting point / range	Not available.
Pour point	-15 °C
Relative density/Specific gravity	Not available.
Density	893 kg/m ³ (0.893 g/cm ³) at 15°C
Solubility	insoluble in water.

10 . Stability and reactivity

Stability	The product is stable.
Conditions to avoid	Avoid extreme temperatures, strong oxidizers, fire.
Incompatibility with various substances/Hazardous Reactions	Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products	Decomposition products may include the following materials: carbon dioxide carbon monoxide

11 . Toxicological information

Effects and symptoms

Eyes	No significant health hazards identified.
Skin	Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.
Inhalation	No significant health hazards identified.
Ingestion	No significant health hazards identified.

Chronic toxicity

Carcinogenic effects	No component of this product at levels greater than or equal to 0.1% is identified as a carcinogen by ACGIH, the International Agency for Research on Cancer (IARC), the European Commission (EC), or the National Occupational Health and Safety Commission (Australia).
Mutagenic effects	No known significant effects or critical hazards.

12 . Ecological information

Ecotoxicity	Not classified as environmentally hazardous in accordance with the 'Approved Criteria for Classifying Hazardous Substances' [NOHSC (1008)/2004 as amended and adapted].
Biodegradability	
Persistence/degradability	The biodegradability of this material has not been determined.

13 . Disposal considerations

Disposal considerations / Waste information	The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
Special Precautions for Landfill or Incineration	No additional special precautions identified.

14 . Transport information

International transport regulations

Not classified as dangerous for transport (ADG, IMDG, ICAO/IATA).

Special precautions for user	No known special precautions required. See Section: "Handling and storage" for additional information.
-------------------------------------	--

15 . Regulatory information

Standard for the Uniform Scheduling of Drugs and Poisons

6

Control of Scheduled Carcinogenic Substances

Ingredient name

No Listed Substance

Schedule

Other regulations

Product name Alpha SP 320

Product code 456557-AU07

Page: 3/4

Version 1 **Date of issue** 18 August 2009

Format Australia
(Australia)

Language ENGLISH
(ENGLISH)

Europe inventory	All components are listed or exempted.
United States inventory (TSCA 8b)	All components are listed or exempted.
Australia inventory (AICS)	All components are listed or exempted.
Canada inventory	All components are listed or exempted.
China inventory (IECSC)	All components are listed or exempted.
Japan inventory (ENCS)	All components are listed or exempted.
Korea inventory (KECI)	All components are listed or exempted.
Philippines inventory (PICCS)	All components are listed or exempted.

16 . Other information

Key to abbreviations

AMP = Acceptable Maximum Peak
ACGIH = American Conference of Governmental Industrial Hygienists, an agency that promulgates exposure standards.
ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail
ADG Code = Australian Code for the Transport of Dangerous Goods by Road and Rail
CAS Number = Chemical Abstracts Service Registry Number
HAZCHEM Code = Emergency action code of numbers and letters which gives information to emergency services. Its use is required by the ADG Code for Dangerous Goods in bulk.
ICAO = International Civil Aviation Organization.
IATA = International Air Transport Association, the organization promulgating rules governing shipment of goods by air.
IMDG = International Maritime Organization Rules, rules governing shipment of goods by water.
IP 346 = A chemical screening assay for dermal toxicity. The European Commission has recommended that Method IP 346 be used as the basis for labelling certain lubricant oil base stocks for carcinogenicity. The EU Commission has stipulated that the classification as a carcinogen need not apply if it can be shown that the substance contains less than 3% DMSO extract as measured by IP 346. (See Note L, European Commission Directive 67/548/EEC as amended and adapted.) DMSO is a solvent.
NOHSC = National Occupational Health & Safety Commission, Australia
TWA = Time weighted average
STEL = Short term exposure limit
UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods.

History

Date of issue	18/08/2009.
Date of previous issue	No previous validation.
Prepared by	Product Stewardship

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from us.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken.

Date of issue : 19 December 2009

Version : 2

1. Identification of the material and supplier

Names

Product code : F625-8298WO
Product name : Polythane AU-625 - Pack A - Straight Whi
Supplier : Protec
97-105 Bedford Street
Gillman SA 5013
Ph: (08) 8447 6311 Fax: (08) 8341 0853
Emergency telephone number : 1800 033111 (24 hr)

Uses

Recommended use Coating. Paint. Painting-related materials.

2. Hazards identification

Statement of hazardous/dangerous nature : HAZARDOUS SUBSTANCE. DANGEROUS GOODS.

Risk phrases : R10- Flammable.
R67- Vapours may cause drowsiness and dizziness.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. Composition/information on ingredients

Ingredient name	CAS number	Concentration
titanium dioxide	13463-67-7	30 - 60
n-butyl acetate	123-86-4	10 - 30
ethyl 3-ethoxypropionate	763-69-9	0 - 10
solvent naphtha (petroleum), light arom.	64742-95-6	0 - 10
2-methoxy-1-methylethyl acetate	108-65-6	0 - 10
aluminium hydroxide	21645-51-2	0 - 10
1,2,4-trimethylbenzene	95-63-6	0 - 10
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	41556-26-7	0 - 10
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	82919-37-7	0 - 10
silicon dioxide	7631-86-9	0 - 10

Other ingredients, determined not to be hazardous according to NOHSC criteria, and not dangerous according to the ADG Code, make up the product concentration to 100%.

4. First-aid measures

Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

Ingestion : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do not induce vomiting.

Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do not use solvents or thinners.

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open.

Notes to physician : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

Extinguishing media

- Suitable** : Use dry chemical, CO₂, water spray (fog) or foam.
- Not suitable** : Do not use water jet.
- Hazardous combustion products** : Decomposition products may include the following materials:
carbon oxides
metal oxide/oxides
- Special exposure hazards** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. This material is harmful to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Hazchem code** : 3[Y]

6. Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
- Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.
- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

7. Handling and storage

All users should refer to the product **Technical Data Sheet (TDS)** before use.

- Handling** : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

7. Handling and storage

Storage : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Occupational exposure limits

Ingredient name

titanium dioxide

n-butyl acetate

ethyl 3-ethoxypropionate

2-methoxy-1-methylethyl acetate

aluminium hydroxide

1,2,4-trimethylbenzene

silicon dioxide

Exposure limits

SWA (Australia, 8/2005).

TWA: 10 mg/m³, 0 times per shift, 8 hour(s).

SWA (Australia, 8/2005).

STEL: 950 mg/m³, 0 times per shift, 15 minute(s).

STEL: 200 ppm, 0 times per shift, 15 minute(s).

TWA: 713 mg/m³, 0 times per shift, 8 hour(s).

TWA: 150 ppm, 0 times per shift, 8 hour(s).

MAK-Werte Liste (Germany, 7/2008). Absorbed through skin.

PEAK: 610 mg/m³, 4 times per shift, 15 minute(s).

PEAK: 100 ppm, 4 times per shift, 15 minute(s).

TWA: 610 mg/m³ 8 hour(s).

TWA: 100 ppm 8 hour(s).

SWA (Australia, 8/2005). Absorbed through skin.

STEL: 548 mg/m³, 0 times per shift, 15 minute(s).

STEL: 100 ppm, 0 times per shift, 15 minute(s).

TWA: 274 mg/m³, 0 times per shift, 8 hour(s).

TWA: 50 ppm, 0 times per shift, 8 hour(s).

SWA (Australia, 8/2005).

TWA: 2 mg/m³, (as Al), 0 times per shift, 8 hour(s). Form: Soluble

SWA (Australia, 8/2005).

TWA: 123 mg/m³, 0 times per shift, 8 hour(s).

TWA: 25 ppm, 0 times per shift, 8 hour(s).

SWA (Australia, 8/2005).

TWA: 2 mg/m³, 0 times per shift, 8 hour(s). Form: Respirable fraction

Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Exposure controls

Engineering measures

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eyes

: Safety glasses with side shields.

Gloves

: For prolonged or repeated handling, use the following type of gloves:

Recommended: foil

Respiratory

: If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

8 . Exposure controls/personal protection

- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

References: Eye protectors should conform to AS/NZS 1336 and AS/NZS 1337. Chemical-resistant gloves should conform to AS/NZS 2161.1. Respiratory protection should conform to AS/NZS 1715 and AS/NZS 1716. Occupational footwear should conform to AS/NZS 2210.

9 . Physical and chemical properties

- Physical state** : Liquid.
- Colour** : Not available.
- Odour** : Not available.
- Boiling point** : >37.78°C (>100°F)
- Melting point** : Not available.
- Vapour pressure** : Not available.
- Relative density** : 1.43
- Flash point** : Closed cup: 25°C (77°F)
- Flammable limits** : Not available.
- Vapour density** : Not available.
- pH** : Not available.
- Auto-ignition temperature** : Not available.
- Solubility** : Not available.

10 . Stability and reactivity

- Stability** : The product may not be stable under certain conditions of storage or use.
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
- Materials to avoid** : Reactive or incompatible with the following materials:
oxidizing materials
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 . Toxicological information

Potential acute health effects

- Inhalation** : Vapours may cause drowsiness and dizziness.
- Ingestion** : No known significant effects or critical hazards.
- Skin contact** : May cause skin irritation.
- Eye contact** : May cause eye irritation.

Over-exposure signs/symptoms

Inhalation of vapour/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Inhalation of high concentrations of vapour may affect the central nervous system.

- Target organs** : Contains material which causes damage to the following organs: lungs, brain, upper respiratory tract, eyes, central nervous system (CNS).
Contains material which may cause damage to the following organs: blood, kidneys, skin.

12 . Ecological information

Environmental effects : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Other ecological information

Biodegradability

Other ecological information

Persistence/degradability

Conclusion/Summary : Not available.

Mobility : Not available.

Other adverse effects : No known significant effects or critical hazards.

Do not allow to enter drains or watercourses.

13 . Disposal considerations

Waste disposal : The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14 . Transport information

Regulation	UN number	Proper shipping name	Classes	PG*	Additional information
ADG	1263	Paint.	3	III	<u>Hazchem code</u> 3[Y]
ADR	1263	Paint.	3	III	-
IMDG	1263	Paint.	3	III	-
IATA	1263	Paint.	3	III	-

PG* : Packing group

15 . Regulatory information

Standard for the Uniform Scheduling of Drugs and Poisons

SUSDP Schedule : None.

Control of Scheduled Carcinogenic Substances

Ingredient name

No listed substance

Schedule

Australia inventory (AICS) : Not determined.

16 . Other information

Date of issue : 19 December 2009

Organisation that prepared the MSDS : EHS

☑ Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by Protec, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

Date of issue : 7 May 2010

Version : 6

1. Identification of the material and supplier

Names

Product code : F625-9225
Product name : POLYTHANE AU -625- HARDENER
Supplier : Protec
97-105 Bedford Street
Gillman SA 5013
Ph: (08) 8447 6311 Fax: (08) 8341 0853
Emergency telephone number : 1800 033111 (24 hr)

Uses

Recommended use Coating. Paint. Painting-related materials.

2. Hazards identification

Statement of hazardous/dangerous nature : HAZARDOUS SUBSTANCE. DANGEROUS GOODS.

Risk phrases : R10- Flammable.
R20/21- Harmful by inhalation and in contact with skin.
R38- Irritating to skin.
R42/43- May cause sensitisation by inhalation and skin contact.

Safety phrases : S23- Do not breathe vapor or spray.
S36/37- Wear suitable protective clothing and gloves.
S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

3. Composition/information on ingredients

Ingredient name	CAS number	Concentration
Isocyanic acid, hexamethylene ester, polymers	28182-81-2	30 - 60
xylene	1330-20-7	30 - 60
ethylbenzene	100-41-4	0 - 10
n-butyl acetate	123-86-4	0 - 10
Solvent naphtha (petroleum), light arom.	64742-95-6	0 - 10
1,2,4-trimethylbenzene	95-63-6	0 - 10
mesitylene	108-67-8	0 - 10
2-ethoxy-1-methylethyl acetate	54839-24-6	0 - 10

Other ingredients, determined not to be hazardous according to Safe Work Australia criteria, and not dangerous according to the ADG Code, make up the product concentration to 100%.

4. First-aid measures

Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

Ingestion : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do not induce vomiting.

Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open.

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

5 . Fire-fighting measures

Extinguishing media

Suitable : Use dry chemical, CO₂, water spray (fog) or foam.

Not suitable : Do not use water jet.

Hazardous combustion products : Decomposition products may include the following materials:
carbon oxides
nitrogen oxides
Hydrogen cyanide (HCN).
Cyanate and isocyanate.

Special exposure hazards : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Hazchem code : 3[Y]

6 . Accidental release measures

Personal precautions : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental precautions : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Large spill : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

Special provisions : Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Place in a suitable container. The contaminated area should be cleaned immediately with a suitable decontaminant. One possible (flammable) decontaminant comprises (by volume): water (45 parts), ethanol or isopropyl alcohol (50 parts) and concentrated (d: 0,880) ammonia solution (5 parts). A non-flammable alternative is sodium carbonate (5 parts) and water (95 parts). Add the same decontaminant to the remnants and let stand for several days until no further reaction in an unsealed container. Once this stage is reached, close container and dispose of according to local regulations (see section 13). Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

7. Handling and storage

All users should refer to the product Technical Data Sheet (TDS) before use.

Handling

: Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Persons with a history of skin sensitisation problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage

: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Precautions should be taken to minimise exposure to atmospheric humidity or water. CO₂ will be formed, which, in closed containers, could result in pressurisation. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Occupational exposure limits

Ingredient name

Isocyanic acid, hexamethylene ester, polymers

Exposure limits

NOHSC (Australia).

TWA: 0.02 mg/m³

STEL: 0.07 mg/m³

Safe Work Australia (Australia, 8/2005). Skin sensitiser.

STEL: 0.07 mg/m³ 15 minute(s).

TWA: 0.02 mg/m³ 8 hour(s).

xylene

Safe Work Australia (Australia, 8/2005).

STEL: 655 mg/m³, 0 times per shift, 15 minute(s).

STEL: 150 ppm, 0 times per shift, 15 minute(s).

TWA: 350 mg/m³, 0 times per shift, 8 hour(s).

TWA: 80 ppm, 0 times per shift, 8 hour(s).

ethylbenzene

Safe Work Australia (Australia, 8/2005).

STEL: 543 mg/m³, 0 times per shift, 15 minute(s).

STEL: 125 ppm, 0 times per shift, 15 minute(s).

TWA: 434 mg/m³, 0 times per shift, 8 hour(s).

TWA: 100 ppm, 0 times per shift, 8 hour(s).

n-butyl acetate

Safe Work Australia (Australia, 8/2005).

STEL: 950 mg/m³, 0 times per shift, 15 minute(s).

STEL: 200 ppm, 0 times per shift, 15 minute(s).

TWA: 713 mg/m³, 0 times per shift, 8 hour(s).

TWA: 150 ppm, 0 times per shift, 8 hour(s).

1,2,4-trimethylbenzene

Safe Work Australia (Australia, 8/2005).

TWA: 123 mg/m³, 0 times per shift, 8 hour(s).

TWA: 25 ppm, 0 times per shift, 8 hour(s).

mesitylene

Safe Work Australia (Australia, 8/2005).

TWA: 123 mg/m³, 0 times per shift, 8 hour(s).

TWA: 25 ppm, 0 times per shift, 8 hour(s).

2-ethoxy-1-methylethyl acetate

TRGS900 AGW (Germany, 7/2009).

PEAK: 600 mg/m³ 15 minute(s).

PEAK: 100 ppm 15 minute(s).

TWA: 300 mg/m³ 8 hour(s).

8 . Exposure controls/personal protection

TWA: 50 ppm 8 hour(s).

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
- Exposure controls**
- Engineering measures** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment. Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. Air-fed protective respiratory equipment must be worn by the spray operator, even when good ventilation is provided. In other operations, if local exhaust ventilation and good general extraction are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn. (See Personal protection.)
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eyes** : Safety glasses with side shields.
- Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Gloves** : butyl rubber
- Respiratory** : By other operations than spraying, in well ventilated areas, air-fed respirators could be replaced by a combination charcoal filter and particulate filter mask. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. By spraying: air-fed respirator.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
- Restrictions on use** : Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used.

References: Eye protectors should conform to AS/NZS 1336 and AS/NZS 1337. Chemical-resistant gloves should conform to AS/NZS 2161.1. Respiratory protection should conform to AS/NZS 1715 and AS/NZS 1716. Occupational footwear should conform to AS/NZS 2210.

9 . Physical and chemical properties

- Physical state** : Liquid.
- Colour** : Clear.
- Odour** : Hydrocarbon.
- Boiling point** : >37.78°C (>100°F)
- Melting point** : Not available.
- Vapour pressure** : 0.12 kPa (0.9 mm Hg)
- Relative density** : 0.98
- Density** : 0.984 g/cm³
- Flash point** : Closed cup: 38°C (100.4°F)

9 . Physical and chemical properties

Flammable limits	: Lower: 1% Upper: 7%
Vapour density	: Not available.
pH	: Not available.
Auto-ignition temperature	: Not available.
Solubility	: Not available.
Solubility in water at room temperature (g/l):	: 2 g/l

10 . Stability and reactivity

Stability	: The product may not be stable under certain conditions of storage or use.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Uncontrolled exothermic reactions occur with amines and alcohols. The product reacts slowly with water, resulting in the production of carbon dioxide. In closed containers, pressure build-up could result in distortion, expansion and, in extreme cases, bursting of the container.
Materials to avoid	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: Cyanate and isocyanate.

11 . Toxicological information

Potential acute health effects

Inhalation	: Harmful by inhalation. May cause sensitisation by inhalation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Ingestion	: Irritating to mouth, throat and stomach.
Skin contact	: Harmful in contact with skin. Irritating to skin. May cause sensitisation by skin contact.
Eye contact	: May cause eye irritation.

Over-exposure signs/symptoms

Inhalation of vapour/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Inhalation of high concentrations of vapour may affect the central nervous system. Based on the properties of the isocyanate components and considering toxicological data on similar preparations, this preparation may cause acute irritation and/or sensitisation of the respiratory system, leading to an asthmatic condition, wheezing and tightness of the chest. Sensitised persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Repeated exposure may lead to permanent respiratory disability.

<u>Target organs</u>	: Contains material which causes damage to the following organs: brain, central nervous system (CNS). Contains material which may cause damage to the following organs: blood, kidneys, liver, gastrointestinal tract, upper respiratory tract, skin, eyes.
-----------------------------	--

12 . Ecological information

Environmental effects	: No known significant effects or critical hazards.
------------------------------	---

Other ecological information

Biodegradability

Other ecological information

Persistence/degradability

Conclusion/Summary	: Not available.
Mobility	: Not available.
Other adverse effects	: No known significant effects or critical hazards. Do not allow to enter drains or watercourses.

13 . Disposal considerations

Waste disposal : The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14 . Transport information

Regulation	UN number	Proper shipping name	Classes	PG*	Additional information
ADG	1263	Paint.	3	III	<u>Hazchem code</u> 3[Y]
ADR	1263	Paint.	3	III	-
IMDG	1263	Paint.	3	III	-
IATA	1263	Paint.	3	III	-

PG* : Packing group

15 . Regulatory information

Standard for the Uniform Scheduling of Drugs and Poisons

SUSDP Schedule : Schedule 6

Control of Scheduled Carcinogenic Substances

Ingredient name

No listed substance

Schedule

Australia inventory (AICS) : All components are listed or exempted.

16 . Other information

Date of issue : 7 May 2010

Organisation that prepared the MSDS : EHS

Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by Protec, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

GENERAL FEATURES:

HIGH PERFORMANCE DURABLE TWO PACK ACRYLIC POLYURETHANE FINISH

OUTSTANDING GLOSS

EXCELLENT DURABILITY

RECOATABLE WITH MINIMUM SURFACE PREPARATION

SUPERIOR OPACITY

PRINCIPAL USES:

ATMOSPHERIC CHEMICAL AND MARINE SERVICE WHERE GLOSS AND COLOUR RETENTION, HARDNESS AND ABRASION RESISTANCE IS REQUIRED.

RESISTANCE PROPERTIES:

Heat: Up to 120°C dry.

Abrasion: Excellent

Water: Very good. Satisfactory for intermittent immersion

Solvent: Good to splash and spillage of common alcohols hydrocarbons and ketones.

Chemical: Good for splash spillage of most alkalies. Acid can cause reaction with lead pigments.

Weathering: Excellent gloss and colour retention.

Toxicity: Some colours may contain lead pigments, therefore refer label for lead warning. Mixed paint contains isocyanates.

COLOURS:

AS 2700 and RAL Colour Range available.

APPLICATION METHODS

Conventional Air Spray: Typical set up 300-400 kPa, 1- 1.5 mm Fluid Nozzle. Add up to 20% BR 199 Polythane Reducer.

Airless Spray: Typical set up 32:1 pump ratio with a fluid tip of approximately 380 micrometers (0.015 inch) and a nozzle pressure of 14 MPa (2000 psi). Thinning is not generally required, however a small amount of BR 199 Polythane Reducer may be added if required.

Brush/Roller: Suitable for small areas, touch up or repair.

Clean up: BR199 Polythane Reducer

NOTE: Do not apply at temperatures less than 5°C, or when the relative humidity exceeds 85%, or if the surface temperature is within 3°C of the Dew Point.

POLYTHANE AU – 625

GENERIC TYPE: TWO COMPONENT ACRYLIC POLYURETHANE ENAMEL

SURFACE TO STEEL, GALVANISED STEEL, ZINC

BE COATED: COATED STEEL, ALUMINIUM AND TIMBER.

PRODUCT DESCRIPTION: HIGH PERFORMANCE , RECOATABLE ACRYLIC POLYURETHANE ENAMEL

GENERAL PHYSICAL PROPERTIES AND APPLICATION DATA:

FINISH	High Gloss
COMPONENTS	2
HARDENER	625 – 9225 Polythane Hardener – Pack B
THINNERS	BR 199 POLYTHANE REDUCER
MIXING RATIO (V/V)	2 parts AU - 625 Pack A 1 part 625 - 9225 Pack B
POT LIFE	4 - 6 hours at 25°C.
VOLUME SOLIDS %	App 50% but will vary with colour
FLASH POINT	33°C
RECOMMENDED DRY FILM THICKNESS PER COAT	50 microns
THEORETICAL COVERAGE	9.5 m ² / L at 50 microns DFT
PRACTICAL COVERAGE	Allow appropriate loss factor.
DRYING TIMES	Temp Touch Hard 25°C 3 hr 16 hr
RECOAT	Temp Min Max 25°C 16 hr INDEFINITE
APPLICATION	Conventional or Airless Brush/Roll small areas.

POLYTHANE AU - 625

COATING SYSTEM RECOMMENDATIONS

SURFACE	PREPARATION	SYSTEM	DRY FILM THICKNESS
STEEL	Abrasive Blast Clean to AS 1627.4 Class 2.5	BARRIER EX - 408 Epoxy Primer	75 microns
HEAVY INDUSTRIAL		BARMASTIC EMH -375 High Build	200 microns
LIGHT / MEDIUM INDUSTRIAL		POLYTHANE AU - 625	50 microns
		BARRIER EX - 408 Epoxy Primer	75 microns
		POLYTHANE AU - 625	50 microns
		POLYTHANE AU - 625 (if required)	50 microns
ALUMINIUM, ZINC COATED & GALVANISED STEEL	Clean & Degrease Surface. Mechanical Abrade.	BARRIER EX - 408 Epoxy Primer	75 microns
		POLYTHANE AU - 625	50 microns
		POLYTHANE AU - 625 (if required)	50 microns

* **REFER** to your Barrier Protective Coatings Representative for specific recommendations for your special application.

PACK SIZES

POLYTHANE AU - 625 - PACK A - 20 Litres, 4 Litres
 POLYTHANE AU - 625 HARDENER PACK B - 5 Litres, 1 litre

HEALTH AND SAFETY

PACK A

UN NO. 1263
 Flash Point 33 °C
 Packaging Group III
 Precautions Flammable

PACK B

UN NO. 1866
 Flash Point 38 °C
 Packaging Group III
 Precautions Flammable

Contains volatile and flammable solvents. Contains a maximum content of 0.37 grams per 100 ml of volatile free organic isocyanate. Keep away from all sources of heat and open flames. Do not smoke whilst handling. Wear suitable protective clothing to avoid contact with skin and eyes. Provide adequate ventilation during use and avoid breathing vapour. Do not spray in confined or poorly ventilated areas without the use of approved air supplied breathing apparatus.

FIRST AID

Eyes: If paint splashed in eyes, irrigate with copious amounts of clean water for 15 minutes. Seek medical aid if irritation persists.

Skin: If paint splashed on skin, wash affected area thoroughly with soap and water. If irritation persists seek medical aid. Remove all contaminated clothing and launder before re-use.

Inhalation: If affected by exposure to vapours, remove from area, keep at rest and seek medical aid if symptoms persist.

Ingestion: If swallowed, give glass of water to drink and seek medical assistance. Do not induce vomiting.

Consult separate Material Safety Data Sheet for more detailed Health and Safety information.

ISSUED: JUL , 2000

This information is furnished without warranty, representation, inducement or licence of any kind except that it is accurate to the best of Protec Pty Ltd's knowledge or obtained by Protec Pty Ltd from sources believed by it to be accurate and Protec Pty Ltd does not assume any legal responsibility for use or reliance upon the same. Customers are encouraged to conduct their own tests. This information is non-controlled. It is the responsibility of the user to ensure that the issue is current.

Barrier Chemicals Pty. Ltd. is a wholly owned subsidiary of Protec Pty. Ltd.

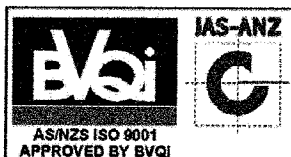
Protec Pty. Ltd. (S.A.)
 97-105 Bedford Street,
 Gillman, S.A. 5013
 PH: (08) 8447 6311

Protec Pty. Ltd. (N.S.W.)
 356 Horsley Road,
 Milperra, N.S.W. 2214
 PH: (02) 9792 1411

Protec Pty. Ltd. (VIC.)
 17 McIntosh Street,
 Airport West, VIC 3042
 PH: (03) 9335 2500

Protec Pty. Ltd. (QLD)
 190 Kerry Road,
 Archerfield, QLD 4108
 PH: (07) 3274 1188

Fortec Paints Ltd.
 13 Ashfield Street,
 GLENFIELD, N.Z.
 PH: (09) 444 7244



Gillman SA

Protec Pty. Ltd. (W.A.)
 87 Welshpool Road,
 Welshpool, W.A. 6106
 PH: (09) 9351 8727