SAFETY DATA SHEET



Spheerol EPL 2

Section 1. Identification

| GHS product identifier | Spheerol EPL 2 |
|----------------------------------|--|
| Product code | 451356-AU13 |
| SDS no. | 451356 |
| Relevant identified uses of the | substance or mixture and uses advised against |
| Use of the substance/ mixture | Grease for industrial applications. For specific application advice see appropriate Technical Data Sheet or consult our company representative. |
| Manufacturer | |
| Supplier | Castrol Australia Pty Ltd Level 17, 717 Bourke Street Docklands, Victoria 3008 ABN 87 008 459 407 www.castrol.com.au |
| | Tel: +61 (03) 9268 4111 Fax: +61 (03) 9268 3321 |
| EMERGENCY TELEPHONE NUMBER | +61 2801 44558 (or 1800 14 14 74 within Australia) |
| OTHER PRODUCT | Technical Advice Helpline Number: 1300 557 998 |

Section 2. Hazard(s) identification

| Classification of the substance or mixture | Not classified. |
|---|---|
| GHS label elements | |
| Signal word | No signal word. |
| Hazard statements | No known significant effects or critical hazards. |
| Precautionary statements | |
| Prevention | Not applicable. |
| Response | Not applicable. |
| Storage | Not applicable. |
| Disposal | Not applicable. |
| Supplemental label elements | Not applicable. |
| Other hazards which do not result in classification | Defatting to the skin. Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. See 'Notes to physician' under First-Aid Measures, Section 4 of this Safety Data Sheet. |

Section 3. Composition and ingredient information

Substance/mixture

Substance

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

| Ingredient name | % (w/w) | CAS number |
|------------------------|----------|---------------------|
| Base oil - unspecified | 50 - 100 | Varies - See Key to |
| | | abbreviations |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-aid measures

Description of necessary 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. |
|--------------|---|
| Inhalation | If inhaled, remove to fresh air. Get medical attention if symptoms occur. |
| 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 symptoms occur. |
| Ingestion | Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |

Most important symptoms/effects, acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

Indication of immediate medical attention and special treatment needed, if necessary

| 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. |
|----------------------------|---|
| Specific treatments | No specific treatment. |
| Protection of first-aiders | No action shall be taken involving any personal risk or without suitable training. |

Section 5. Fire-fighting measures

| Extinguishing media | |
|--|---|
| Suitable extinguishing media | In case of fire, use water fog, alcohol resistant foam, dry chemical or carbon dioxide extinguisher or spray. |
| Unsuitable extinguishing media | Do not use water jet. |
| Specific hazards arising from the chemical | No specific fire or explosion hazard. |
| Hazardous thermal decomposition products | Combustion products may include the following: carbon dioxide carbon monoxide |

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Section 5. Fire-fighting measures

| Special protective actions for fire-fighters | 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. |
|---|---|
| Special protective equipment for fire-fighters | Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. |

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

| For non-emergency personnel | 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. Floors may be slippery; use care to avoid falling. |
|--------------------------------|---|
| For emergency responders | If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". |
| 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). |
| Methods and material for cont | ainment and cleaning up |
| 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. |
| | |

Section 7. Handling and storage

| Precautions for safe handling | |
|--|---|
| Protective measures | Put on appropriate personal protective equipment (see Section 8). |
| Advice on general occupational hygiene | Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. |
| Conditions for safe storage, including any incompatibilities | Store in accordance with local regulations. 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. Keep away from heat and direct sunlight. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. 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. |

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits |
|------------------------|---|
| Base oil - unspecified | Safe Work Australia (Australia). TWA: 5 mg/m ³ 8 hours. Form: Oil mist, mineral |

| Appropriate engineering controls | 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. Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits. 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. |
|-------------------------------------|---|
| 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. |
| Individual protection measures | |
| 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. |
| Eye/face protection | Safety glasses with side shields. |
| Skin protection | |
| Hand protection | Wear protective gloves if prolonged or repeated contact is likely. Wear 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. |
| Skin protection | Use of protective clothing is good industrial practice. Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required. 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. |
| Other skin protection | Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |

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Section 8. Exposure controls and personal protection

| e developed for each intended application. d therefore be chosen in consultation with I assessment of the working conditions. |
|---|
| d AS/NZS 1716 ZS 1337 |
| d I c |

Section 9. Physical and chemical properties

| Appearance | |
|--|---|
| Physical state | Grease |
| Colour | Brown. |
| Odour | Not available. |
| Odour threshold | Not available. |
| рН | Not available. |
| Melting point | Not available. |
| Boiling point | Not available. |
| Flash point | Open cup: >240°C (>464°F) [Cleveland.] |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not applicable. Based on - Physical state |
| Lower and upper explosive (flammable) limits | Not available. |
| Vapour pressure | Not available. |
| Vapour density | Not available. |
| Relative density | <1000 kg/m³ (<1 g/cm³) at 15°C |
| Solubility | insoluble in water. |
| Partition coefficient: n- | Not available. |
| octanol/water | |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |

Section 10. Stability and reactivity

| Reactivity | No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information. |
|-------------------------------------|---|
| Chemical stability | The product is stable. |
| Possibility of hazardous reactions | Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerisation will not occur. |
| Conditions to avoid | Avoid all possible sources of ignition (spark or flame). |
| Incompatible materials | Reactive or incompatible with the following materials: oxidising materials. |
| Hazardous decomposition products | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

Section 11. Toxicological information

Information on toxicological effects

| Routes of entry anticipated: Dermal, Inhalation. |
|--|
| |
| No known significant effects or critical hazards. |
| No known significant effects or critical hazards. |
| Defatting to the skin. May cause skin dryness and irritation |
| No known significant effects or critical hazards. |
| |

| Symptoms related to the physical, chemical and toxicological characteristics | | |
|--|--|--|
| Eye contact | No specific data. | |
| Inhalation | No specific data. | |
| Skin contact | Adverse symptoms may include the following: irritation dryness cracking | |
| Ingestion | No specific data. | |

| Delayed and immediate effects and also chronic effects from short and long term exposure | | |
|--|---|--|
| Eye contact | Potential risk of transient stinging or redness if accidental eye contact occurs. | |
| Inhalation | Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation. | |
| Skin contact | Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/ or dermatitis. | |
| Ingestion | Ingestion of large quantities may cause nausea and diarrhoea. | |
| General | No known significant effects or critical hazards. | |
| Carcinogenicity | No known significant effects or critical hazards. | |
| Mutagenicity | No known significant effects or critical hazards. | |
| Teratogenicity | No known significant effects or critical hazards. | |
| Developmental effects | No known significant effects or critical hazards. | |
| Fertility effects | No known significant effects or critical hazards. | |

Section 12. Ecological information

Persistence and degradability

Expected to be biodegradable.

Bioaccumulative potential

This product is not expected to bioaccumulate through food chains in the environment.

Mobility in soil

Soil/water partition
coefficient (Koc)Not available.MobilitySpillages may penetrate the soil causing ground water contamination.

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Section 12. Ecological information

Other ecological information Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimised wherever possible. 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. 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.

Section 14. Transport information

| | ADG | IMDG | ΙΑΤΑ |
|-------------------------------|----------------|----------------|----------------|
| UN number | Not regulated. | Not regulated. | Not regulated. |
| UN proper shipping name | - | - | - |
| Transport hazard class(es) | - | - | - |
| Packing group | - | - | - |
| Environmental hazards | No. | No. | No. |
| Additional information | - | - | - |

Special precautions for user Not available.

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Section 15. Regulatory information

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| tandard Uniform Schedule of Medicine and Poisons | | | | |
|--|---|--|--|--|
| lot regulated. | | | | |
| Model Work Health and Safety I | Regulations - Scheduled Substances | | | |
| No listed substance | | | | |
| International lists | | | | |
| National inventory | | | | |
| REACH Status | For the REACH status of this product please consult your company contact, as identified in Section 1. | | | |
| 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. | | | |
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| Korea inventory (KECI) | All components are listed |
|--------------------------------------|---------------------------|
| Philippines inventory (PICCS) | All components are listed |
| Taiwan inventory (CSNN) | Not determined. |
| United States inventory (TSCA 8b) | All components are listed |

Section 16. Any other relevant information

| History | |
|--------------------------------|---|
| Date of printing | 26/10/2015 |
| Date of issue/Date of revision | 26/10/2015 |
| Date of previous issue | No previous validation |
| Version | 1 |
| | Product Stewardship |
| Key to abbreviations | ADG = Australian Dangerous Goods ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) NOHSC = National Occupational Health and Safety Commission STEL = Short term exposure limit SUSMP = Standard Uniform Schedule of Medicine and Poisons UN = United Nations TWA = Time weighted average VOC = Volatile Organic Compound SADT = Self-Accelerating Decomposition Temperature Varies = may contain one or more of the following 101316-69-2, 101316-70-5, 101316-71-6, 101316-72-7, 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64741-97-5, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-64-9, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1, 74869-22-0, 90669-74-2 |

or exempted. or exempted.

or exempted.

Procedure used to derive the classification

| Classification | Justification | |
|-----------------|---------------|--|
| Not classified. | | |

✓ Indicates information that has changed from previously issued version.

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 BP Group.

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

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Section 16. Any other relevant information

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. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.