Material Safety Data Sheet ENGINE SPLINE GREASE

1. Identification of the material and supplier

Product type	: Solid.
Material uses	: Lubricants; grease.
Area of application	: Industrial applications.
<u>Uses</u>	
Emergency telephone number	: CHEMTREC U.S. and Canada - 800.424.9300 Outside the U.S. and Canada - +01 703.527.3887 Sydney Chemtrec: +61 2 9037 2994
Supplier	: Mercury Marine 41-71 Bessemer Drive Dandenong South, Victoria 3175 Australia Tel: +61 3 9791 5822
<u>Supplier</u>	
SDS #	: 1521
ADG	: -
Product code	: 92 802869Q1
Product name	: ENGINE SPLINE GREASE
<u>Names</u>	

2. Hazards identification

Classification	: Not regulated.
Risk phrases	: Not classified.
Statement of hazardous/dangerous nature	: NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.

3. Composition/information on ingredients

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: Yes.

Ingredient name	CAS number	Concentration
Distillates (petroleum), solvent-dewaxed heavy paraffinic (<3% DMSO Extractables by IP346 test method)	64742-65-0	15-30
Distillates (petroleum), solvent-refined heavy paraffinic (<3% DMSO Extractables by IP346 test method)	64741-88-4	15-30
Mineral oil.	-	10-20
Calcium carbonate	471-34-1	10-20
Mineral oil.	-	1-5

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%.

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.

4. First aid measures

First aid measures		
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.	
Ingestion	: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.	
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.	
Eye contact	 Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. 	
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training.	
Advice to doctor	: 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 an extinguishing agent suitable for the surrounding fire.
Not suitable	: None known.
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.
	No specific fire or explosion hazard.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide metal oxide/oxides
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.

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).
Methods for cleaning up	
Small spill	: Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
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, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7. Handling and storage

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. Remove contaminated clothing and protective equipment before entering eating areas.

7. Handling and storage

Storage

: 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 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 unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Occupational exposure limits			
Ingredient name			Exposure limits
(<3% DMSO Extractables by IP346 test method)			ACGIH TLV (United States, 2/2010). TWA: 5 mg/m ³ 8 hour(s). Form: Inhalable fraction. See Appendix C, paragraph A. Inhalable Particulate Mass TLVs (IPM–TLVs) for those materials that are hazardous when deposited anywhere in the respiratory tract.
Distillates (petroleum), solvent-refined heavy paraffinic (<3% DMSO Extractables by IP346 test method)			ACGIH TLV (United States, 2/2010). TWA: 5 mg/m ³ 8 hour(s). Form: Inhalable fraction. See Appendix C, paragraph A. Inhalable Particulate Mass TLVs (IPM–TLVs) for those materials that are hazardous when deposited anywhere in the respiratory tract.
Mineral oil.			ACGIH TLV (United States, 2/2010). TWA: 5 mg/m ³ 8 hour(s). Form: Inhalable fraction. See Appendix C, paragraph A. Inhalable Particulate Mass TLVs (IPM–TLVs) for those materials that are hazardous when deposited anywhere in the respiratory tract.
Calcium carbonate			EH40/2005 WELs (United Kingdom (UK), 8/2007). TWA: 10 mg/m ³ 8 hour(s). Form: inhalable dust TWA: 4 mg/m ³ 8 hour(s). Form: respirable dust
Mineral oil.			ACGIH TLV (United States, 2/2010). TWA: 5 mg/m ³ 8 hour(s). Form: Inhalable fraction. See Appendix C, paragraph A. Inhalable Particulate Mass TLVs (IPM–TLVs) for those materials that are hazardous when deposited anywhere in the respiratory tract.
Recommended monitoring procedures	:	atmosphere or biologic	ingredients with exposure limits, personal, workplace al monitoring may be required to determine the effectiveness er control measures and/or the necessity to use respiratory
Exposure controls			
Engineering measures	:	control worker exposur ingredients with exposu	equirements. Good general ventilation should be sufficient to e to airborne contaminants. If this product contains ure limits, use process enclosures, local exhaust ventilation or ols to keep worker exposure below any recommended or
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	:		ring with an approved standard should be used when a risk his is necessary to avoid exposure to liquid splashes, mists or
Hands	:		pervious gloves complying with an approved standard should en handling chemical products if a risk assessment indicates
Respiratory	:	standard if a risk asses be based on known or	ir-purifying or air-fed respirator complying with an approved sement indicates this is necessary. Respirator selection must anticipated exposure levels, the hazards of the product and of the selected respirator.
Skin	:	Personal protective equ	uipment for the body should be selected based on the task ne risks involved and should be approved by a specialist
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8. Exposure controls/personal protection

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.

9. Physical and chemical properties

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Physical state	: Solid. [grease]
Color	: Blue.
Odor	: Mild. Petroleum oil
Boiling point	: Not available.
Melting point	: Not available.
Vapor pressure	: Not available.
Density	: 0.96 g/cm ³
Flash point	: Not available.
Flammable limits	: Not available.
Vapor density	: Not available.
рН	: Not available.
Viscosity	: Not available.
Auto-ignition temperature	: Not available.
Evaporation rate	: Not available.
Solubility	: Insoluble in the following materials: cold water and hot water.

10. Stability and reactivity

Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Materials to avoid	: No specific data.
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	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Eye contact	: No known significant effects or critical hazards.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), solvent-dewaxed heavy paraffinic (<3% DMSO Extractables by IP346 test method)	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Mineral oil.	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Calcium carbonate	LD50 Oral	Rat	6450 mg/kg	-
Conclusion/Summary	: Irritating to eyes and sk mechanical irritation. N			

mechanical irritation. NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.

Potential chronic health effects

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<u>Chronic toxicity</u> Conclusion/Summary	: Repeated or prolonged or irritation.	exposure to spray	or mist m	ay produce re	spiratory tract
Irritation/Corrosion					
Product/ingredient name	Result	Species	Score	Exposure	Observation
Calcium carbonate	Eyes - Severe irritant Skin - Moderate irritant	Rabbit Rabbit	-	-	-
Conclusion/Summary			•	•	
Skin	: No significant irritation e EXPECTED TO PRODU THE RECOMMENDED	JĆE SIGNIFICAN	T ADVER	SE HEALTH E	FFECTS WHEN
Eyes	: No significant irritation expected other than possible mechanical irritation. NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.				
Respiratory	: Repeated or prolonged exposure to spray or mist may produce respiratory tract irritation.				
<u>Sensitizer</u>					
Conclusion/Summary					
Skin	 No specific information is available in our database regarding the skin sensitizing properties of this product. Sensitization not suspected for humans. 				
Respiratory	: Sensitization not suspect	ted for humans.			
Carcinogenicity					
Conclusion/Summary	: There are no data availa for humans.	There are no data available on the preparation itself. Carcinogenicity not suspected for humans.			
Mutagenicity					
Conclusion/Summary	: There are no data available on the preparation itself. Mutagenicity not suspected for humans.				
Teratogenicity					
Conclusion/Summary	: There are no data availa for humans.	: There are no data available on the preparation itself. Teratogenicity not suspected for humans.			
Reproductive toxicity					
Conclusion/Summary	 There are no data available on the preparation itself. Not considered to be dangerous to humans, according to our database. 				
Chronic effects	: 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.				
<u>)ver-exposure signs/sympto</u>	oms				
Inhalation	: No specific data.				
Ingestion	: No specific data.				
Skin	: No specific data.				
Eyes	: No specific data.				

12. Ecological information

Ecotoxicity Aquatic ecotoxicity	: Not readily biodegradable.		
Product/ingredient name	Result	Species	Exposure
Calcium carbonate	Acute LC50 >56000000 ug/L Fresh water	Fish - Gambusia affinis - Adult	96 hours
Conclusion/Summary	: There are no data available on the preparation itself.		

12. Ecological information

Other ecological information

Persistence/degradability

Conclusion/Summary

: This product has not been tested for biodegradation. Not readily biodegradable. This product is not expected to bioaccumulate through food chains in the environment.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
ENGINE SPLINE GREASE	-		Not readily
Mineral oil.	-	-	Not readily

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

13. Disposal considerations

Methods of disposal	: The generation of waste should be avoided or minimized 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 spilled material and runoff and contact with soil,
	waterways, drains and sewers.

14. Transport information

Regulation	UN number	Proper shipping name	Classes	PG*	Label	Additional information
ADG	Not regulated.	-	-	-		-
ADR	Not regulated.	-	-	-		-
IMDG	Not regulated.	-	-	-		-
ΙΑΤΑ	Not regulated.	-	-	-		-

PG* : Packing group

15. Regulatory information

Standard for the Uniform Scheduling of Drugs and Poisons Not regulated. **Control of Scheduled Carcinogenic Substances** No listed substance Australia inventory (AICS) : All components are listed or exempted. International lists : Australia inventory (AICS): All components are listed or exempted. China inventory (IECSC): All components are listed or exempted. Japan inventory: Not determined. Korea inventory: All components are listed or exempted. New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted Philippines inventory (PICCS): All components are listed or exempted. Europe inventory : Not determined. **EU Classification** : Not classified. **HCS Classification** : Irritating material

16. Other information

Date of issue/ Date of revision	: 11/22/2011.
Version	: 1
Date of previous issue	: No previous validation.

Indicates information that has changed from previously issued version.

Disclaimer

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.