HYUNDAI Genuine Parts

Safety Data Sheet
according to WHS Regulations

Printing date 14.07.2017 Revision: 14.07.2017

1 Identification

Product Name: HYUNDAI GENUINE SUPER DOT - 4 BRAKE FLUID

Other Means of Identification: Mixture

Recommended Use of the Chemical and Restriction on Use: Automotive brake system

Details of Manufacturer or Importer:
Mobis Parts Australia Pty Ltd
77 Peter Brock Drive
Eastern Creek NSW 2766

Phone Number: 61 2 8822 8733

Emergency telephone number: National Poison Information Centre: 13 11 26

2 Hazard(s) Identification

Hazardous Nature:
Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.
Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)


corrosion

Serious Eye Damage/Irritation 1 H318 Causes serious eye damage.

Signal Word Danger

Hazard Statements
H318 Causes serious eye damage.

Precautionary Statements

P280	Wear eye protection / face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.

3 Composition and Information on Ingredients

Chemical Characterization: Mixtures
Description: Mixture of substances listed below with nonhazardous additions.

Hazardous Components:

143-22-6	2-[2-(2-butoxyethoxy)ethoxy]ethanol Serious Eye Damage/Irritation 1, H318	24 - 28%
111-46-6	2,2'-oxybisethanol Acute Toxicity (Oral) 4, H302	3 - 5%
111-42-2	Ethanol, 2,2'-iminobis- STOT RE 2, H373; Serious Eye Damage/Irritation 1, H318; Acute Toxicity (Oral) 4, H302; Skin Corrosion/Irritation 2, H315; STOT SE 3, H335	0.3 - 1.5%
29385-43-1	Methyl-1H-benzotriazole Acute Toxicity (Oral) 4, H302; Acute Toxicity (Dermal) 4, H312; Acute Toxicity (Inhalation) 4, H332; Skin Corrosion/Irritation 2, H315; Serious Eye Damage/ Irritation 2A, H319; STOT SE 3, H335	<0.5%

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87-69-4	(+)-Tartaric acid Serious Eye Damage/Irritation 2A, H319	<0.1%
128-37-0	Butylated hydroxytoluene (BHT) Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Corrosion/Irritation 2, H315; Serious Eye Damage/Irritation 2A, H319	<0.1%

4 First Aid Measures

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

Skin Contact:
In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap for at least 15 minutes. Seek medical attention if symptoms occur.

Eye Contact:
In case of eye contact, hold eyelids open and rinse with water for at least 15 minutes. Do not rub eyes. Seek medical attention if symptoms occur.

Ingestion:
If swallowed, do not induce vomiting. Immediately rinse mouth with water. Give a glass of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Symptoms Caused by Exposure:
Inhalation: May cause dizziness, drowsiness and headache.
Skin Contact: May be harmful in contact with skin. May cause mild skin irritation.
Eye Contact: Causes serious eye damage.
Ingestion: May be harmful if swallowed. May cause hypothermia, fever, changes in blood pressure, nausea, vomiting, diarrhoea, chest pain, shortness of breath, headache, dizziness, drowsiness and lethargy.

5 Fire Fighting Measures

Suitable Extinguishing Media:
Water fog, foam, dry chemical or carbon dioxide. Do not use full water jet.
For large fires use water spray or alcohol-resistant foam.

Specific Hazards Arising from the Chemical:
Hazardous combustion products include oxides of carbon.
Product is not flammable but may burn if heated.
Containers close to fire should be removed if safe to do so. Use water spray to cool fire exposed containers.

Special Protective Equipment and Precautions for Fire Fighters:
When fighting a major fire wear self-contained breathing apparatus and protective equipment.

6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:
Wear approved respiratory protection, chemical resistant gloves, protective clothing and safety boots.
Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation. Extinguish all sources of ignition. Avoid sparks and open flames. No smoking.

Environmental Precautions:
In the event of a major spill, prevent spillage from entering drains or water courses.

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Methods and Materials for Containment and Cleaning Up:
Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material.
Collect the spilled material and place into a suitable container for disposal.

7 Handling and Storage

Precautions for Safe Handling:
Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only in a well-ventilated area.
Food, beverages and tobacco products should not be stored or consumed where this material is in use.
Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for Safe Storage:
Store in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Check regularly for leaks. Protect containers from physical damage. Protect from heat, sparks, open flames and other sources of ignition. Keep away from strong oxidising agents.

8 Exposure Controls and Personal Protection

Exposure Standards:	
111-46-6 2,2'-oxybisethanol	
WES	TWA: 100 mg/m³, 23 ppm
111-42-2 Ethanol, 2,2'-iminobis-	
WES	TWA: 13 mg/m³, 3 ppm
128-37-0 Butylated hydroxytoluene (BHT)	
WES	TWA: 10 mg/m³

Engineering Controls:
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapour below occupational exposure standards.

Respiratory Protection:
Use an approved organic vapour respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:
Protective gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information.
When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.
Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

Eye and Face Protection:
Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 Physical and Chemical Properties

Appearance:
Form: Liquid

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Colour:	Amber
Odour:	No information available
Odour Threshold:	No information available
pH-Value:	8 - 9
Melting point/freezing point:	-51 °C
Initial Boiling Point/Boiling Range:	>270 °C
Flash Point:	>140 °C
Flammability:	Product is not flammable.
Auto-ignition Temperature:	>200 °C
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	3 Vol %
Upper:	15 Vol %
Vapour Pressure at 20 °C:	<1 hPa
Density at 20 °C:	1.05 g/cm³ (±0.01)
Vapour Density at 20 °C:	>1 g/cm³
Evaporation Rate:	No information available
Solubility in Water:	Soluble
Partition Coefficient (n-octanol/water):	No information available
Viscosity at 20 °C:	12 - 16 mm²/s

10 Stability and Reactivity

Possibility of Hazardous Reactions: Hazardous polymerisation will not occur.

Chemical Stability: Stable at ambient temperature and under normal conditions of use.

Conditions to Avoid: Heat, sparks, open flames and other sources of ignition.

Incompatible Materials: Oxidising agents.

Hazardous Decomposition Products: Oxides of carbon.

11 Toxicological Information

Toxicity:

LD_{50}/LC_{50} Values Relevant for Classification:		
143-22-6 2-[2-(2-butoxyethoxy)ethoxy]ethanol		
Oral	LD_{50}	5300 mg/kg (rat)
Dermal	LD_{50}	2000 mg/kg (rabbit)
111-46-6 2,2'-oxybisethanol		
Oral	LD_{50}	12565 mg/kg (rat)
Dermal	LD_{50}	11890 mg/kg (rabbit)
111-42-2 Ethanol, 2,2'-iminobis-		
Oral	LD_{50}	1613 mg/kg (rat)
Dermal	LD_{50}	11890 mg/kg (rabbit)
29385-43-1 Methyl-1H-benzotriazole		
Oral	LD_{50}	675 mg/kg (rat)
128-37-0 Butylated hydroxytoluene (BHT)		
Oral	LD_{50}	1559 mg/kg (rat)
Dermal	LD_{50}	>2000 mg/kg (rat)

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87-69-4 (+)-Tartaric acid		
Oral	LD_{50}	4360 mg/kg (rat)
23783-42-8 2,5,8,11-Tetraoxatridecan-13-ol		
Oral	LD_{50}	2000 mg/kg (rat)
Dermal	LD_{50}	2000 mg/kg (rat)

Acute Health Effects
Inhalation: May cause dizziness, drowsiness and headache.
Skin: May be harmful in contact with skin. May cause mild skin irritation.
Eye: Causes serious eye damage.
Ingestion:
May be harmful if swallowed. May cause hypothermia, fever, changes in blood pressure, nausea, vomiting, diarrhoea, chest pain, shortness of breath, headache, dizziness, drowsiness and lethargy.

Skin Corrosion / Irritation: Based on classification principles, the classification criteria are not met.

Serious Eye Damage / Irritation: Causes serious eye damage.

Respiratory or Skin Sensitisation: Based on classification principles, the classification criteria are not met.

Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.

Carcinogenicity:
Diethanolamine is classified by IARC as Group 2B - Possibly carcinogenic to humans.
Butylated hydroxytoluene (BHT) is classified by IARC as Group 3 - Not classifiable as to its carcinogenicity to humans.

Reproductive Toxicity: This product may be harmful to fertility or the unborn child.

Specific Target Organ Toxicity (STOT) - Single Exposure:
Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:
Based on classification principles, the classification criteria are not met.

Aspiration Hazard: Based on classification principles, the classification criteria are not met.

Chronic Health Effects: May cause kidney damage.

Existing Conditions Aggravated by Exposure: No information available

Additional toxicological information: No information available

12 Ecological Information

Ecotoxicity:

Aquatic toxicity:	
111-46-6 2,2'-oxybisethanol	
LC_{50}/96 h	75200 mg/l (fathead minnow)
29385-43-1 Methyl-1H-benzotriazole	
LC_{50}/96 h	36.756 mg/l (fish) (estimate)
EC_{50}/96 h	13.795 mg/l (algae) (estimate)
LC_{50}/48 h	158.021 mg/l (crustacea) (estimate)
111-42-2 Ethanol, 2,2'-iminobis-	
LC_{50}/48 h	103 mg/l (algae)
	2.15 mg/l (crustacea)

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87-69-4 (+)-Tartaric acid	
LC_{50}/96 h	735000 mg/l (fish) (estimate)
EC_{50}/96 h	337000 mg/l (algae) (estimate)
	640000 mg/l (crustacea) (estimate)
23783-42-8 2,5,8,11-Tetraoxatridecan-13-ol	
LC_{50}/96 h	10000 mg/l (brachydanio rerio)

Persistence and Degradability: No further relevant information available.

Bioaccumulative Potential:
2,5,8,11-Tetraoxatridecan13-ol BCF = 3.16
2,2'-oxybisethanol BCF = 100.3
Methyl-1H-benzotriazole BCF = 4.168
Butylated hydroxytoluene (BHT) BCF = 2800
(+)-tartaric acid BCF = 3.162

Mobility in Soil: This product is soluble in water and so is likely to be mobile in soil.
Other adverse effects: No further relevant information available.

13 Disposal Considerations

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.

Special Precautions for Landfill or Incineration:
Please consult your state Land Waste Management Authority for more information.

14 Transport Information

UN Number Not regulated

Proper Shipping Name Not regulated

Dangerous Goods Class Not regulated

Packing Group: Not regulated

15 Regulatory Information

Australian Inventory of Chemical Substances:	
23783-42-8	2,5,8,11-Tetraoxatridecan-13-ol
143-22-6	2-[2-(2-butoxyethoxy)ethoxy]ethanol
111-46-6	2,2'-oxybisethanol
111-42-2	Ethanol, 2,2'-iminobis-
29385-43-1	Methyl-1H-benzotriazole
128-37-0	Butylated hydroxytoluene (BHT)
87-69-4	(+)-Tartaric acid

Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:
Poisons Schedule: 6

16 Other Information

Date of Preparation or Last Revision: 14.07.2017

Prepared by: MSDS.COM.AU Pty Ltd www.msds.com.au

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Abbreviations and acronyms:
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC_{50}: Lethal concentration, 50 percent
LD_{50}: Lethal dose, 50 percent
IARC: International Agency for Research on Cancer
STEL: Short Term Exposure Limit
TWA: Time Weighted Average
NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)
Acute Toxicity (Oral) 4: Acute toxicity – Category 4
Skin Corrosion/Irritation 2: Skin corrosion/irritation – Category 2
Serious Eye Damage/Irritation 1: Serious eye damage/eye irritation – Category 1
Serious Eye Damage/Irritation 2A: Serious eye damage/eye irritation – Category 2A
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Aquatic Acute 1: Hazardous to the aquatic environment, short-term (Acute). Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment, long-term (Chronic). Category 1

Disclaimer
This SDS is prepared in accord with the Safe Work Australia document “Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - February 2016”
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