SAFETY DATA SHEET



Castrol Manual GL-4 140

Section 1. Identification			
GHS product identifier	Castrol Manual GL-4 140		
Product type	Liquid.		
Product code	467182-MY01		
SDS no.	467182		
Relevant identified uses of t	he substance or mixture and uses advised against		
Product use	Manual transmission fluid For specific application advice see appropriate Technical Data Sheet or consult our company representative.		
Supplier	BP Singapore Pte. Limited (196600436K) 7 Straits View Marina One East Tower #26-01, Singapore 018936		
	Tel: +65-6335 3000		
EMERGENCY TELEPHONE NUMBER	Carechem: +65 3158 1074 (24/7)		

Section 2. Hazards 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	
General	P103 - Read label before use. P102 - Keep out of reach of children. P101 - If medical advice is needed, have product container or label at hand.
Prevention	Not applicable.
Response	Not applicable.
Storage	Not applicable.
Disposal	Not applicable.
Other hazards which do not result in classification	Defatting to the skin.

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Section 3. Composition/information on ingredients

Substance/mixture

Mixture

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

Ingredient name	%	CAS number
Residual oils (petroleum), solvent-dewaxed	≥25 - ≤50	64742-62-7
Residual oils (petroleum), hydrotreated	≥25 - ≤50	64742-57-0
Distillates (petroleum), hydrotreated heavy paraffinic	≤10	64742-54-7
(Z)-octadec-9-enylamine	≤0.1	112-90-3

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

Section 5. Firefighting measures

Extinguishing media		
Suitable extinguishing media	In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray.	
Unsuitable extinguishing media	Do not use water jet.	
Specific hazards arising from the chemical	In a fire or if heated, a pressure increase will occur and the container may burst.	
Hazardous thermal decomposition products	Combustion products may include the following: carbon oxides (CO, CO ₂) (carbon monoxide, carbon dioxide)	
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.	

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Section 5. Firefighting measures

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, protecti	ve 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 conta	ainment and cleaning up
Small spill	Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. 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.

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 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.
Not suitable	Prolonged exposure to elevated temperature

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name

Exposure limits

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Section 8. Exposure controls/personal protection

		•			
Residual oils (petroleum), solvent-dewaxed		Workplace Safety and Health Act (Singapore). PEL (long term): 5 mg/m ³ 8 hours. Issued/Revised: 1/1997 Form: Mist PEL (short term): 10 mg/m ³ 15 minutes. Issued/Revised: 1/1997 Form: Mist			
Residual oils (petroleum), hydrotreated		Workplace Safety and Health Act (Singapore). PEL (long term): 5 mg/m ³ 8 hours. Issued/Revised: 1/1997 Form: Mist PEL (short term): 10 mg/m ³ 15 minutes. Issued/Revised: 1/1997 Form: Mist			
Distillates (petroleum), hydrotreated heavy paraffinic		Workplace Safety and Health Act (Singapore). PEL (long term): 5 mg/m ³ 8 hours. Issued/Revised: 1/1997 Form: Mist PEL (short term): 10 mg/m ³ 15 minutes. Issued/Revised: 1/1997 Form: Mist			
procedures atmosphere or of the ventilation protective equination standards. Reference of the standard		contains ingredients with exposure limits, personal, workplace biological monitoring may be required to determine the effectiveness on or other control measures and/or the necessity to use respiratory pment. Reference should be made to appropriate monitoring ference to national guidance documents for methods for the of hazardous substances will also be required.			
Appropriate engineering controls	 Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations 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. 			re limits. o health, to uipment should heering controls) d conform to h and properly for advice on t your national hessment. It is	
Environmental exposure controls	Emissions from they comply with cases, fume so	n ventilation or worl th the requirements crubbers, filters or e be necessary to re	c process equipn of environment engineering modi	nent should be ch al protection legis fications to the pr	ecked to ensure lation. In some ocess
Individual protection measures					
Hygiene measures	Wash hands, for eating, smoking Appropriate teo Wash contamin	orearms and face t g and using the lav chniques should be nated clothing befo are close to the wo	atory and at the used to remove re reusing. Ensu	end of the working potentially contar ure that eyewash	period. ninated clothing.
Eye/face protection	Safety glasses	with side shields.			
Skin protection		e elever lf e l			
Hand protectionWear 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 u and the condition of the gloves (even the best chemically resistant glove will bre down after repeated chemical exposures). Most gloves provide only a short time 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			e of protective of work and use, love will break a short time of pecific work es should be e chosen in ent of the		
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Section 8. Exposure controls/personal protection

	working conditions.
Skin protection	Use of protective clothing is good industrial practice. 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. 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.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Section 9. Physical and chemical properties

Appearance	
Physical state	Liquid.
Colour	Amber. [Dark]
Odour	Not available.
Odour threshold	Not available.
рН	Not available.
Melting point	Not available.
Boiling point	Not available.
Flash point	Closed cup: 194°C (381.2°F) [Pensky-Martens.] Open cup: 254°C (489.2°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	Not available.
Density	898.6 kg/m³ (0.899 g/cm³) at 30°C
Solubility	insoluble in water.
Partition coefficient: n- octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Kinematic: 408.8 mm²/s (408.8 cSt) at 40°C Kinematic: 28.51 mm²/s (28.51 cSt) at 100°C

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

Specific target organ toxicity (single exposure)

Name		Route of exposure	Target organs
(Z)-octadec-9-enylamine	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
(Z)-octadec-9-enylamine	Category 2	Not determined	Not determined

Aspiration hazard

Name	Result		
(Z)-octadec-9-enylamine	ASPIRATION HAZARD - Category 1		

formation on likely routes Routes of entry anticipated: Dermal, Inhalation.			
No known significant effe	cts or critical hazards.		
Vapour inhalation under ambient conditions is not normally a problem due to low vapour pressure.			
Defatting to the skin. May	cause skin dryness and	irritation.	
No known significant effe	cts or critical hazards.		
cal, chemical and toxicol	ogical characteristics		
No specific data.			
	• •	, mists or fumes re	esulting from
Adverse symptoms may i irritation dryness cracking	nclude the following:		
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	No known significant effect Vapour inhalation under a vapour pressure. Defatting to the skin. May No known significant effect cal, chemical and toxicolo No specific data. May be harmful by inhalat thermal decomposition pr Adverse symptoms may in irritation dryness	No known significant effects or critical hazards.Vapour inhalation under ambient conditions is not r vapour pressure.Defatting to the skin. May cause skin dryness and No known significant effects or critical hazards.cal, chemical and toxicological characteristics No specific data.May be harmful by inhalation if exposure to vapour thermal decomposition products occurs.Adverse symptoms may include the following: irritation dryness crackingcal. 4 1409/01/2020.Product code Format Singapore	No known significant effects or critical hazards.Vapour inhalation under ambient conditions is not normally a problem vapour pressure.Defatting to the skin. May cause skin dryness and irritation.No known significant effects or critical hazards.cal, chemical and toxicological characteristicsNo specific data.May be harmful by inhalation if exposure to vapour, mists or fumes re thermal decomposition products occurs.Adverse symptoms may include the following: irritation dryness crackingGL-4 140Product code 467182-MY019/01/2020.Format SingaporeLanguage

Section 11. Toxicological information

Ingestion	No specific data.		
Delayed and immediate effect	ts as well as chronic effects from short and long-term exposure		
Eye contact	Potential risk of transient stinging or redness if accidental eye contact occurs.		
Inhalation	Overexposure to the inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.		
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.		
Potential chronic health effe	ects		
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

<u>Toxicity</u>

Environmental effects

No known significant effects or critical hazards.

Persistence/degradability

Expected to be biodegradable.

Bioaccumulative potential

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

<u>Mobility in soil</u>	
Soil/water partition coefficient (Koc)	Not available.
Mobility	Spillages may penetrate the soil causing ground water contamination.
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.

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Section 13. Disposal considerations

Section 14. Transport information

	ADR/RID	ADN	IMDG	IATA/ICAO
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper - shipping name		-	-	-
Transport hazard class(es)	-	-	-	-
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.
Additional information	-	-	-	-

Special precautions for user Not available.

Section 15. Regulatory information

No known specific national and/or regional regulations applicable to this product Safety, health and (including its ingredients). environmental regulations specific for the product Regulation according to other foreign laws **REACH Status** For the REACH status of this product please consult your company contact, as identified in Section 1. All components are active or exempted. **United States inventory** (TSCA 8b) 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** All components are listed or exempted. (PICCS) **Taiwan Chemical** All components are listed or exempted. **Substances Inventory** (TCSI)

Section 16. Other information

History

Date of issue/Da revision	ite of	2020 September 01				
Date of previous	s issue	2019 May 08				
Version		3				
Prepared by		Product Stewardship				
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Section 16. Other information

Key to abbreviations	ACGIH = American Conference of Industrial Hygienists
	CAS Number = Chemical Abstracts Service Registry Number
	GHS = Global Harmonised System
	IATA = International Air Transport Association, the organisation
	IMDG = International Maritime Organization Rules, rules governing shipment of goods by water.
	OEL = Occupational Exposure Limit
	REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
	Regulation [Regulation (EC) No. 1907/2006]
	SDS = Safety Data Sheet
	STEL = Short term exposure limit
	TWA = Time weighted average
	UN Number = United Nations Number, a four digit number assigned by the United
	Nations Committee of Experts on the Transport of Dangerous Goods.
	Varies = may contain one or more of the following 64741-88-4, 64741-89-5,
	64741-95-3, 64741-96-4, 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, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0,
	72623-87-1
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Indicates information that has changed from previously issued version.

Notice to reader

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