SAFETY DATA SHEET

100 Gear Oil Extreme Pressure Gear Oil 680



Section 1. Identification Product identifier : 100 Gear Oil Extreme Pressure Gear Oil 680 Product code : 301198150007 Other means of : Not available. identification . Product type : Liquid.

Identified uses	
Not available.	
Uses advised against	Reason
None known.	
Company name Address	Calumet Branded Products, LLC 2780 Waterfront Pkwy E. Dr., Suite 200 Indianapolis, IN 46214 USA
	Technical Services 317-328-5660 24 hr CHEMTREC 1-800-424-9300/ International 1-703-527-3887
Importer	Statewide Bearings 67 Kewdale Rd, Kewdale WA 6105 PO Box 205, WELSHPOOL DC WA 6986 Technical Services (During Normal Business Hours): (08) 9248 2381 24 hr. CHEMTREC Australia: +(61)-290372994

Section 2. Hazard(s) identification

Classification of the substance or mixture	:	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
		Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 18.3%
		Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 18.3%
		Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 18.3%
		Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 18.3%
GHS label elements		
Signal word	1	No signal word.
Hazard statements	:	Harmful to aquatic life with long lasting effects.
Precautionary statements		
Prevention	:	Avoid release to the environment.
Response	:	Not applicable.
Storage	:	Not applicable.
Disposal	:	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	:	Not applicable.
Other hazards which do not result in classification	:	None known.

Section 3. Composition and ingredient information

Substance/mixture

Other means of identification

- : Mixture
- : Not available.

Ingredient name	% (w/w)	CAS number
Distillates (petroleum), solvent-dewaxed heavy paraffinic Distillates (petroleum), hydrotreated heavy naphthenic antimony compounds with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this database	≥75 - ≤90 ≤3 ≤3	64742-65-0 64742-52-5 -
Amine Phosphate Compounds (NJTSR No. 800983-5011P)	≤0.3	Proprietary

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	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	 Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Wash out mouth with water. Remove dentures if any. 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. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed				
Potential acute health effects				
Eye contact	: No known significant effects or critical hazards.			
Inhalation	: No known significant effects or critical hazards.			
Skin contact	: No known significant effects or critical hazards.			
Ingestion	: No known significant effects or critical hazards.			
Over-exposure signs/symptoms				
Eye contact	: No specific data.			
Inhalation	: No specific data.			
Skin contact	: No specific data.			
Ingestion	: No specific data.			

Section 4. First aid measures

Indication of immediate me	lical attention and special treatment needed, if necessary
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Firefighting measures

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Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
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. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide
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 appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protect	iv	e 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. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
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). Water polluting material. May be harmful to the environment if released in large quantities.
Methods and material for containment and cleaning up		
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.

Section 6. Accidental release measures

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 spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

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Precautions for safe handling	1	
Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	:	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. 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. 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. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Safe Work Australia (Australia, 4/2018). TWA: 5 mg/m ³ 8 hours. Form: Mist
Distillates (petroleum), hydrotreated heavy naphthenic	Safe Work Australia (Australia, 4/2018). TWA: 5 mg/m ³ 8 hours. Form: Mist
antimony compounds with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this database	Safe Work Australia (Australia, 1/2014). TWA: 0.5 mg/m³, (as Sb) 8 hours.

Appropriate engineering controls	:	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
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.

Section 8. Exposure controls and personal protection

Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Skin protection	
Hand protection	: 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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	: 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.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance		
Physical state	:	Liquid.
Colour	:	Red. [Dark]
Odour	:	Not available.
Odour threshold	:	Not available.
рН	:	Not available.
Melting point	:	Not available.
Boiling point	:	Not available.
Flash point	:	Open cup: 228.89°C (444°F) [Cleveland.]
Evaporation rate	:	Not available.
Flammability (solid, gas)	:	Not available.
Lower and upper explosive (flammable) limits	1	Not available.
Vapour pressure	:	Not available.
Vapour density	:	Not available.
Relative density	:	0.909
Solubility	:	Insoluble in the following materials: cold water and hot water.
Solubility in water	:	Not available.
Partition coefficient: n- octanol/water	1	Not available.
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
Viscosity	1	Kinematic (40°C (104°F)): 68.28 cm²/s (6828 cSt)
Flow time (ISO 2431)	1	Not available.
Pour point	1	-15°C (5°F)

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
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.
Incompatible materials	: No specific data.
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

Acute toxicity	Acute toxicity					
Product/ingredient name	Result	Species	Dose	Exposure		
Distillates (petroleum), solvent-dewaxed heavy paraffinic	LC50 Inhalation Dusts and mists	Rat	>5.53 mg/l	4 hours		
	LD50 Dermal LD50 Oral	Rabbit Rat	>2000 mg/kg >5000 mg/kg	-		
Distillates (petroleum), hydrotreated heavy naphthenic	LC50 Inhalation Dusts and mists	Rat	5.7 mg/l	4 hours		
	LD50 Dermal LD50 Oral	Rabbit Rat	>2000 mg/kg >5000 mg/kg	-		
antimony compounds with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this database	LD50 Dermal	Rabbit	>16000 mg/kg	-		
Amine Phosphate Compounds (NJTSR No. 800983-5011P)	LD50 Oral LD50 Oral	Rat Rat	>16400 mg/kg 300 mg/kg	-		

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
antimony compounds with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this database	Skin - Mild irritant	Rabbit	-	-	-
	Eyes - Mild irritant	Rabbit	-	-	-

Sensitisation

Section 11. Toxicological information

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Product/ingredient name	Route of exposure	Species	Result	
Amine Phosphate Compounds (NJTSR No. 800983-5011P)	skin	Mouse	Sensitising	

Mutagenicity

Product/ingredient name	Test	Experiment	Result
antimony compounds with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this database	-	Subject: Bacteria	Negative
Amine Phosphate Compounds (NJTSR No. 800983-5011P)	OECD 471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria	Negative
00000-00111)	OECD OECD 487 In vitro Micronucleus Test	Experiment: In vitro Subject: Mammalian-Animal Experiment: In vitro Subject: Mammalian-Human	Negative Negative

Carcinogenicity

Not available.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Developmental toxin	Species	Dose	Exposure
Amine Phosphate Compounds (NJTSR No. 800983-5011P)	-	-	-	Rat	Oral: 75 mg/kg	28 days

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes	1	Not available.
of exposure		
Potential acute health effects		

Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.

Symptoms related to the	e physical, chemical and toxicological characteristics
Eye contact	: No specific data.
Inhalation	: No specific data.

Section 11. Toxicological information

Skin contact	: No specific data.
Ingestion	: No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

<u>Short term exposure</u>		
Potential immediate effects	:	Not available.
Potential delayed effects	1	Not available.
Long term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
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Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
Amine Phosphate Compounds (NJTSR No. 800983-5011P)	Chronic NOAEL Oral	Rat	75 mg/kg	-
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.			

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
100 Gear Oil Extreme Pressure Gear Oil 680 Distillates (petroleum), hydrotreated heavy naphthenic	23460.6 N/A	N/A N/A	N/A N/A	516.1 N/A	N/A 5.7
antimony compounds with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this database	500	N/A	N/A	11	N/A
Amine Phosphate Compounds (NJTSR No. 800983-5011P)	500	N/A	N/A	N/A	N/A

Section 12. Ecological information

Toxicity

Section 12. Ecological information

Product/ingredient name	Result	Species	Exposure
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Acute EC50 >100 mg/l	Algae	72 hours
	Acute EC50 >100 mg/l	Daphnia	48 hours
	Acute LC50 >100 mg/l	Fish	96 hours
	Chronic NOEL >1 mg/l	Daphnia	21 days
Distillates (petroleum), hydrotreated heavy naphthenic	Acute EC50 >100 mg/l	Algae	72 hours
•	Acute EC50 >100 mg/l	Crustaceans	48 hours
	Acute LC50 >100 mg/l	Fish	96 hours
Amine Phosphate Compounds (NJTSR No. 800983-5011P)	Acute EC50 1.9 mg/l	Algae	72 hours
	Acute EC50 6.8 mg/l	Daphnia	48 hours
	Acute LC50 18 mg/l	Fish	96 hours
	Acute NOEC 0.1 mg/l	Algae	72 hours
	Acute NOEC 3.9 mg/l	Daphnia	48 hours
	Acute NOEC 12 mg/l	Fish	96 hours

Persistence and degradability

Product/ingredient name	Test	Result		Dose	Inoculum
Amine Phosphate Compounds (NJTSR No. 800983-5011P)	OECD 301B Ready Biodegradability - CO2 Evolution Test	9 % - Not readily - 2	8 days	-	-
Product/ingredient name	Aquatic half-life		Photolysi	S	Biodegradability
Distillates (petroleum), hydrotreated heavy naphthenic Amine Phosphate Compounds (NJTSR No. 800983-5011P)	-		-		Inherent Not readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Distillates (petroleum), solvent-dewaxed heavy paraffinic	2 to 6	-	high

Mobility in soil Soil/water partition coefficient (Koc)	: Not available.
Other adverse effects	: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimised wherever possible. 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	ADG	ADR/RID	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available. to Annex II of Marpol and the IBC Code

Section 15. Regulatory information

Standard Uniform Schedule of Medicine and Poisons

Not regulated.

Model Work Health and Safety Regulations - Scheduled Substances

Ingredient name	<u>Schedule</u>
antimony compounds with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this database	Restricted hazardous chemical [For abrasive blasting at a concentration of greater than 0.1% as antimony]

Inventory list Australia : All components are listed or exempted. Canada : All components are listed or exempted. China : All components are listed or exempted. Europe : All components are listed or exempted. Japan : Japan inventory (ENCS): All components are listed or exempted. Japan inventory (ISHL): Not determined. **New Zealand** : All components are listed or exempted. **Philippines** Not determined. **Republic of Korea** : Not determined. Taiwan : Not determined. Thailand Not determined. : Not determined. Turkey **United States** : All components are listed or exempted. Viet Nam : Not determined.

Section 16. Any other relevant information

<u>History</u>	
Date of issue/Date of revision	: 06/01/2020
Version	: 1
Key to abbreviations	 ADG = Australian Dangerous Goods ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road 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 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available SGG = Segregation Group SUSMP = Standard Uniform Schedule of Medicine and Poisons UN = United Nations

Procedure used to derive the classification

Classification	Justification
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3	Calculation method

✓ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed 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.