Issue date: 03-04-2016 Revision date: 09-11-2018 Supersedes date: 09-26-2017 Version number: 4.0



SAFETY DATA SHEET

1. Identification

| Product identifier | Synthetic PAO Lubricant 100 | |
|---|--|--|
| Product Code | 301244 | |
| SDS number | 6343 | |
| Other means of identification | | |
| Synonyms | Old product Code 63570; For Package Codes 301244 | |
| Product Code | 301244 | |
| Recommended use of the chemical and restrictions on use | | |
| Recommended use | Compressor Lubricant | |

Recommended useCompressor LRestrictions on useNot available.

Details of manufacturer or importer

Calumet Branded Products, LLC GPO Darling Park Towers 2 201 Sussex St. Sydney AU NSW 2000 Australia 2780 Waterfront Pkwy E. Dr., Suite 200 Indianapolis, IN 46214 1 317 328 5660 CHEMTREC: 1800 069 100 (AUS)

2. Hazard(s) identification

Classification of the hazardous chemical

| Physical hazards | Not classified. |
|-----------------------|-----------------|
| Health hazards | Not classified. |
| Environmental hazards | Not classified. |

Label elements, including precautionary statements

| ; | | | |
|--|---|--|--|
| Hazard symbol(s) | None. | | |
| Signal word | None. | | |
| Hazard statement(s) | The mixture does not meet the criteria for classification. | | |
| Precautionary statement(s | | | |
| Prevention | Observe good industrial hygiene practices. | | |
| Response | Wash hands after handling. | | |
| Storage | Store away from incompatible materials. | | |
| Disposal | Dispose of waste and residues in accordance with local authority requirements. | | |
| Other hazards which do not result in classification | None known. | | |
| Supplemental information | 88.89% of the mixture consists of component(s) of unknown acute inhalation toxicity. 88.89% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 88.89% of the mixture consists of component(s) of unknown long-term hazards to the aquatic | | |

3. Composition/information on ingredients

environment.

Mixture

| Identity of chemical ingredients | CAS number and other unique identifiers | Concentration of ingredients |
|--|---|---------------------------------|
| Synthetic Oils | Proprietary | 80 - 100 |
| Distillates (petroleum), Hydrotreated Heavy Paraffinic | 64742-54-7 | 10 - < 20 |
| Other components below reportable levels | | 10 - < 20 |
| Material name: Synthetic PAO Lubricant 100 | | SDS AUSTRALIA |

4. First-aid measures

Description of necessary first aid measures

| Bessenption of needsbar y mote | | | |
|--|---|--|--|
| Inhalation | Move to fresh air. Call a physician if symptoms develop or persist. | | |
| Skin contact | Wash off with soap and water. Get medical attention if irritation develops and persists. | | |
| Eye contact | Rinse with water. Get medical attention if irritation develops and persists. | | |
| Ingestion | Rinse mouth. Get medical attention if symptoms occur. | | |
| Personal protection for first-aid responders | Not available. | | |
| Symptoms caused by exposure | Direct contact with eyes may cause temporary irritation. | | |
| Medical attention and special treatment | Treat symptomatically. | | |
| 5. Fire-fighting measures | | | |
| Extinguishing media | | | |
| Suitable extinguishing media | Water fog. | | |
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. | | |
| Specific hazards arising from the chemical | During fire, gases hazardous to health may be formed. | | |
| Special protective equipment and precautions for fire fighters | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Wear suitable protective equipment. | | |
| Hazchem code | None. | | |
| Specific methods | Use standard firefighting procedures and consider the hazards of other involved materials. | | |

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

| For non-emergency personnel | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS. | |
|--|--|--|
| For emergency responders | Not available. | |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. | |
| Methods and materials for containment and cleaning up | Prevent entry into waterways, sewer, basements or confined areas. | |
| | Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. | |
| | Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. | |
| | Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. | |
| 7. Handling and storage | | |
| Precautions for safe handling | Observe good industrial hygiene practices. | |
| Conditions for safe storage, including any incompatibilities | Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). | |
| | | |

8. Exposure controls and personal protection

Control parameters

Follow standard monitoring procedures.

Occupational exposure limits

| Australia. National Workp Components | lace OELs (Workplace Exposure S Type | tandards for Airborne Conta Value | aminants, Appendix A) | | |
|---|---|---|-----------------------|--|--|
| Distillates (petroleum), Hydrotreated Heavy Paraffinic (CAS 64742-54-7) | TWA | 5 mg/m3 | | | |
| Australia. OELs. (Adopted | National Exposure Standards for | Atmospheric Contaminants | in the Occupational | | |
| Environment) Components | Tupo | Value | Form | | |
| · . | Туре | | | | |
| Distillates (petroleum), Hydrotreated Heavy Paraffinic (CAS 64742-54-7) | TWA | 5 mg/m3 | Mist. | | |
| Compounds in the Work A | | - | | | |
| Components | Туре | Value | Form | | |
| Distillates (petroleum), Hydrotreated Heavy Paraffinic (CAS 64742-54-7) | TWA | 5 mg/m3 | Respirable fraction. | | |
| Biological limit values | No biological exposure limits noted | for the ingredient(s). | | | |
| Appropriate engineering controls | Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. | | | | |
| Individual protection measure Eye/face protection | es, for example personal protectiv Wear safety glasses with side shield | • • | | | |
| Skin protection Hand protection | Wear appropriate chemical resistant | Wear appropriate chemical resistant gloves. | | | |
| Other | Wear suitable protective clothing. | | | | |
| Respiratory protection | In case of insufficient ventilation, wear suitable respiratory equipment. | | | | |
| Thermal hazards | Wear appropriate thermal protective clothing, when necessary. | | | | |
| Hygiene measures | Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment t remove contaminants. | | | | |
| 9. Physical and chemical | properties | | | | |
| Appearance | Oily. Liquid. | | | | |
| Physical state | Liquid. | | | | |
| Form | Liquid. | | | | |
| Color | Reddish-purple | • | | | |
| Odor | Characteristic. | | | | |
| Odor threshold | Not available. | | | | |
| рН | Not available. | | | | |
| Melting point/freezing point | Not available. | | | | |
| Initial boiling point and boiling range | Not available. | | | | |
| Flash point | 509.0 °F (265.0 °C) Pensky-Martens Closed Cup | | | | |
| Evaporation rate | Not available. | | | | |
| Flammability (solid, gas) | Not applicable. | | | | |
| Upper/lower flammability or e | - | | | | |
| Flammability limit - lower (%) | | | | | |
| Flammability limit - | Not available. | | | | |

upper (%)

| Explosive limit - lower (%) | Not available. |
|--|--------------------------|
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | 0.00001 hPa estimated |
| Density | 210.00 kg/m ³ |
| Vapor density | Not available. |
| Relative density | Not available. |
| Solubility(ies) | |
| Solubility (water) | Not available. |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | 100.42 cSt |
| Viscosity temperature | 104 °F (40 °C) ASTM D445 |
| Other physical and chemical pa | rameters |
| Explosive properties | Not explosive. |
| Oxidizing properties | Not oxidizing. |
| Percent volatile | 0.00002 % estimated |
| Pour point | < -59.8 °F (< -51 °C) |

0.85

< 1 %

10. Stability and reactivity

Specific gravity

voc

| 5 | 5 |
|---------------------------------------|---|
| Reactivity | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| Chemical stability | Material is stable under normal conditions. |
| Possibility of hazardous reactions | No dangerous reaction known under conditions of normal use. |
| Conditions to avoid | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials. |
| Incompatible materials | Strong oxidizing agents. |
| Hazardous decomposition products | Nitrogen oxides (NOx). At thermal decomposition temperatures, carbon monoxide and carbon dioxide. |

11. Toxicological information

Information on possible routes of exposure

| Inhalation | No adverse effects due to inhalation are expected. | | |
|-----------------------------------|--|--|--|
| Skin contact | No adverse effects due to skin contact are expected. | | |
| Eye contact | Direct contact with eyes may cause temporary irritation. | | |
| Ingestion | Expected to be a low ingestion hazard. | | |
| Symptoms related to exposure | Direct contact with eyes may cause temporary irritation. | | |
| Acute toxicity | Not known. | | |
| Skin corrosion/irritation | Due to partial or complete lack of data the classification is not possible. | | |
| Serious eye damage/irritation | Direct contact with eyes may cause temporary irritation. | | |
| Respiratory or skin sensitization | on | | |
| Respiratory sensitization | Not a respiratory sensitizer. | | |
| Skin sensitization | This product is not expected to cause skin sensitization. | | |
| Germ cell mutagenicity | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. | | |

| Carcinogenicity | Due to lack of data the classification is not possible. | | |
|---|--|--|--|
| ACGIH Carcinogens | | | |
| Distillates (petroleum), Hy (CAS 64742-54-7) | vdrotreated Heavy Paraffinic A4 Not classifiable as a human carcinogen. | | |
| Reproductive toxicity | This product is not expected to cause reproductive or developmental effects. | | |
| Specific target organ toxicity - single exposure | Not classified. | | |
| Specific target organ toxicity - repeated exposure | Due to lack of data the classification is not possible. | | |
| Aspiration hazard | Not an aspiration hazard. | | |

12. Ecological information

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

| Product | | Species | Test Results | |
|-----------------------------|----------------|---|-------------------------------------|--|
| Synthetic PAO Lubricant 100 | | | | |
| Aquatic | | | | |
| Crustacea | EC50 | Daphnia | 18964.5527 mg/l, 48 hours estimated | |
| Fish | LC50 | Fish | 84313.8594 mg/l, 96 hours estimated | |
| Persistence and degradabil | ity No data is | y No data is available on the degradability of any ingredients in the mixture. | | |
| Bioaccumulative potential | | | | |
| Mobility in soil | No data av | No data available for this product. | | |
| Other adverse effects | | No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component. | | |
| | | | | |

13. Disposal considerations

| Disposal methods | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. |
|------------------------|--|
| Residual waste | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). |
| Contaminated packaging | Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. |

14. Transport information

ADG

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not established. Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

Safety, health and environmental regulations

National regulationsThis Safety Data Sheet was prepared in accordance with Australia Model Code of Practice for the
preparation of Safety Data Sheets for Hazardous Chemicals (23/12/2011).

High Volume Industrial Chemicals (HVIC)

Distillates (petroleum), Hydrotreated Heavy Paraffinic (CAS 64742-54-7)

International regulations

1000 - 9999 TONNES See the regulation for additional information.

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | No |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | No |
| Taiwan | Taiwan Chemical Substance Inventory (TCSI) | No |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

| Issue date | 03-04-2016 |
|----------------------|--|
| Revision date | 09-11-2018 |
| Disclaimer | Calumet Branded Products, LLC cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available. |
| Revision information | This document has undergone significant changes and should be reviewed in its entirety |