

# SAFETY DATA SHEET

According to Work Health and Safety Regulations 2011 and National Model Code of Practice for the preparation of Safety Data Sheets for Hazardous Chemicals

Version 1.1

Issue date: 18/09/2019

Revision date: 18/09/2019

SDS Record Number: CSSS-TCO-010-128840

## 1. Identification of the material and supplier

**Material name:** L-QB 300 Heat Transfer Fluid  
**Other Names:** -  
**Recommended use:** Suitable for closed and open loop heating system with the highest process temperature less than 290°C.

**Manufacturer:**  
**Supplier(Manufacturer):** SINOPEC LUBRICANT CO.,LTD  
**Address:** No. 6 Anning Zhuang West Road, Haidian District, Beijing, P.R.China  
**Contact person(E-mail):** csc.lube@sinopec.com  
**Telephone:** 86-800-810-9886  
**Fax:** 86-10-82410856  
**Emergency number:** 86-800-810-9886

**Australia Supplier(Manufacturer):** International Lubricant Distributors Pty. Ltd.  
**Address:** Level 3, 43 Kishorn Road, Applecross, 6153 Australia  
**Contact person(E-mail):** -  
**Telephone:** -  
**Fax:** +61 8 9381 1788  
**Emergency number:** 1300 558 939

**New Zealand Supplier(Manufacturer):** Waitomo Lubricants Limited (GST 104255744)  
**Address:** 15 Ellis Street, Frankton, Hamilton, PO Box 5125, Hamilton 3242  
**Telephone:** +64 7 847 0829  
**Fax:** +64 7 846 0032  
**Emergency number:** +64 7 847 0829 (24 Hrs)

**New Zealand Supplier(Manufacturer):** MTS ENERGY LTD  
**Address:** 44 Northcote Road, North Shore,Auckland 0627, New Zealand  
**Telephone:** +64 9 480 8921  
**Fax:** +64 9 480 8398  
**Emergency number:** 0800 399 993 (24 Hrs)

**New Zealand Supplier(Manufacturer):** Ixom Operations Pty Ltd (Incorporated in Australia)  
NZBN: 9429041465226  
**Address:** 166 Totara Street, Mt Maunganui South, New Zealand  
**Contact person(E-mail):** -  
**Telephone:** +64 9 368 2700  
**Fax:** +64 9 368 2710  
**Emergency number:** 0 800 734 607 (ALL HOURS)

## 2. Hazards identification

**GHS classification:**

Material name: L-QB 300 Heat Transfer Fluid

Version #: 1.1

Issue date: 18-09-2019.

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SDS AUSTRALIA

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<b>Physical hazards:</b>	Not classified	
<b>Health hazards:</b>	Not classified	
<b>Environmental hazards:</b>	Hazardous to the aquatic environment - acute hazard	Category 3
	Hazardous to the aquatic environment - long-term hazard	Category 3

**GHS label elements:**

<b>Hazard Pictograms: :</b>	No hazard pictogram is used.
<b>Signal word:</b>	No signal word is used.
<b>Hazard statement:</b>	Harmful to aquatic life with long lasting effects

**Precautionary statement:**

<b>Prevention:</b>	Avoid release to the environment.
<b>Response:</b>	Not applicable.
<b>Storage:</b>	Not applicable.
<b>Disposal:</b>	Dispose of contents/container in accordance with local regulation.

**Specific hazards:** Not applicable.

**3. Composition/information on ingredients**

Components	CAS No.	Percent
Highly refined mineral oil	64742-65-0	99.9 - 98 %weight
Diphenylamine	122-39-4	0.1 – 2%weight

**4. First aid measures**

<b>Inhalation:</b>	No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.
<b>Skin:</b>	No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.
<b>Eye:</b>	No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.
<b>Ingestion:</b>	No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.
<b>Notes to physician:</b>	Treat symptomatically.

**5. Fire-fighting measures**

<b>Suitable extinguishing media:</b>	Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.
<b>Extinguishing media which must not be used for safety reasons:</b>	Not available.
<b>Specific hazards arising from the chemical:</b>	A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion.
<b>Fire Fighting:</b>	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
<b>HAZCHEM code</b>	None.

**6. Accidental release measures**

<b>Personal precautions:</b>	Eliminate all sources of ignition in vicinity of spilled material.
<b>Containment procedures:</b>	Do not let product enter drains.
<b>Methods for cleaning up:</b>	Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as

possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

## 7. Handling and storage

### Precautions for safe handling:

Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

### Storage:

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

## 8. Exposure controls/personal protection

### Control parameters

Follow standard monitoring procedures

### Occupational exposure limits

#### Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A)

Components	Type	Value	
Diphenylamine (CAS122-39-4)	TWA	10 mg/m3	
Highly refined mineral oil (CAS 64742-65-0)	TWA	5 mg/m3	

#### Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

Components	Type	Value	Form
Diphenylamine (CAS122-39-4)	TWA	10 mg/m3	
Highly refined mineral oil (CAS 64742-65-0)	TWA	5 mg/m3	Mist.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Diphenylamine (CAS122-39-4)	TWA	10 mg/m3	
Highly refined mineral oil (CAS 64742-65-0)	TWA	5 mg/m3	Inhalable fraction.

#### UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	
Diphenylamine (CAS122-39-4)	STEL	20 mg/m3	
	TWA	10 mg/m3	

#### Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value	Form
Diphenylamine (CAS122-39-4)	TWA	5 mg/m3	Vapor and aerosol,

			inhalable fraction.
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<b>Biological limit values:</b>	No biological exposure limits noted for the ingredient(s).
<b>Exposure guidelines</b>	No exposure standards allocated.
<b>Appropriate engineering controls:</b>	Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
<b>Personal protective equipment:</b>	
<b>Eye/face protection:</b>	No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.
<b>Skin protection:</b>	No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances in the workplace.
<b>Respiratory protection:</b>	No respiratory protection is normally required. No respiratory protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material. If user operations generate an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge. Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.
<b>Hand protection:</b>	Suggested materials for protective gloves include: Neoprene, Nitrile Rubber.

## 9. Physical and chemical properties

<b>Appearance:</b>	
<b>Physical state:</b>	Liquid
<b>Form:</b>	Liquid
<b>Color:</b>	Light to Brown
<b>Odor:</b>	Petroleum odor
<b>Odour threshold:</b>	Not available
<b>PH:</b>	Not available
<b>Melting point/Freezing point:</b>	Not available
<b>Initial boiling point and boiling range:</b>	>280°C (Estimated value)
<b>Flash point:</b>	180 °C Minimum (Cleveland Open Cup)
<b>Evaporation rate:</b>	Not available
<b>Flammability (solid, gas) :</b>	Not available
<b>Upper/lower flammability or explosive limits:</b>	Not available
<b>Vapor pressure:</b>	<0.5Pa@20°C (Estimated value)
<b>Vapor density(Air = 1):</b>	>1 Minimum
<b>Density:</b>	0.84 kg/l - 0.93 kg/l (20°C)
<b>Solubility (H<sub>2</sub>O) :</b>	Insoluble in water.
<b>Partition coefficient (n-octanol/water) :</b>	Not available
<b>Auto-ignition temperature:</b>	320 °C Minimum
<b>Decomposition temperature:</b>	Not available
<b>Viscosity, dynamic:</b>	20 mm <sup>2</sup> /s – 40 mm <sup>2</sup> /s @40°C
<b>Organic solvents:</b>	Not available
<b>Water:</b>	Not available
<b>VOC (EC) :</b>	Not available
<b>Solids contents:</b>	Not available
<b>Molecular Formula:</b>	Not available
<b>Molecular Weight:</b>	Not available

Pour Point:

-15°C (Typical)

## 10. Stability and reactivity

<b>Reactivity:</b>	The substance is stable under normal storage and handling conditions.
<b>Chemical stability:</b>	Stable at room temperature in closed containers under normal storage and handling conditions.
<b>Possibility of hazardous reactions:</b>	No dangerous reactions known.
<b>Conditions to avoid:</b>	Incompatible materials.
<b>Incompatible materials:</b>	May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
<b>Hazardous decomposition products:</b>	A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion.

## 11. Toxicological information

### Toxicological data:

#### Acute toxicity:

##### Highly refined mineral oil (CAS#64742-65-0)

LD50(Oral, Rat): > 5000 mg/kg bw

LD50(Dermal, Rabbit): > 5000 mg/kg bw

LC50(Inhalation, Rat): > 5.53 mg/L 4 h

**Skin corrosion/Irritation:** No data available.

**Serious eye damage/irritation:** No data available.

**Respiratory or skin sensitization:** No data available.

**Germ cell mutagenicity:** No data available.

**Carcinogenicity:** No data available.

**Reproductive toxicity:** No data available.

**STOT- single exposure:** No data available.

**STOT-repeated exposure:** No data available.

**Aspiration hazard:** No data available.

**Other information** This product has no known adverse effect on human health.

## 12. Ecological information

### Toxicity:

#### Highly refined mineral oil (CAS#64742-65-0)

Acute toxicity		Time	Species	Method	Evaluation	Remarks
LL50	> 100 mg/L	96h	Fish	OECD 203	N/A	N/A
EL50	> 10000 mg/L	48h	Daphnia	OECD 202	N/A	N/A
EC50	N/A	72h	Algae	OECD 201	N/A	N/A

**Persistence and degradability:** This material is not expected to be readily biodegradable. The biodegradability of this material is based on an evaluation of data for the components or a similar material.

**Bioaccumulative potential:** Not available.

**Mobility in soil:** Not available.

**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

<b>Disposal methods:</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
<b>Waste from residues/unused products:</b>	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).
<b>Contaminated packaging:</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

### ADG

<b>UN number</b>	Not regulated
<b>Proper shipping name</b>	Not regulated
<b>Hazard class</b>	Not regulated
<b>Packing group</b>	Not regulated
<b>Labels required</b>	Not regulated
<b>Special precautions</b>	Read safety instructions, SDS and emergency procedures before handling.

### IATA

<b>UN number</b>	Not regulated
<b>Proper shipping name</b>	Not regulated
<b>Hazard class</b>	Not regulated
<b>Packing group</b>	Not regulated
<b>Special precautions</b>	Read safety instructions, SDS and emergency procedures before handling.

### IMDG

<b>UN number</b>	Not regulated
<b>Proper shipping name</b>	Not regulated
<b>Hazard class</b>	Not regulated
<b>Packing group</b>	Not regulated
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	No
<b>Special precautions</b>	Read safety instructions, SDS and emergency procedures before handling.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** Not regulated

## 15. Regulatory information

### Safety, health and environmental regulations

#### National regulations

**Australia Medicines & Poisons Appendix A/D/E/F/G/H/I/J/K / Australia Medicines & Poisons Schedule 2/3/4/5/6/7/8/9/10**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Appendix B**

Diphenylamine (CAS122-39-4)

**High Volume Industrial Chemicals (HVIC)**

Highly refined mineral oil (CAS 64742-65-0) 10000 - 99999 TONNES See the regulation for additional information.

**Importation of Ozone Depleting Substances (Customs(Prohibited imports) Regulations 1956, Schedule 10)**

Not listed.

**National Pollutant Inventory (NPI) substance reporting list**

Not listed.

**Prohibited Carcinogenic Substances**

Not regulated.

**Prohibited Substances (National Model Regulation for the control of Workplace Hazardous Substances, Schedule 2**

**NOHSC:1005 (1994) as amended)**

Not listed.

**Restricted Importation of Organochlorine Chemicals (Customs(Prohibited Imports) Regulations 1956, Schedule 9)**

Not listed.

**Restricted Carcinogenic Substances**

Not regulated.

**International regulations**

**Stockholm Convention**

Not applicable

**Rotterdam Convention**

Not applicable.

**Kyoto protocol**

Not applicable.

**Montreal Protocol**

Not applicable.

**Basel Convention**

Not applicable.

**Inventory status:**

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

\*A "Yes" indicates this product complies 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**

<b>Indication of changes:</b>	Version 1.1
<b>Training instructions:</b>	Not applicable.
<b>Further information:</b>	This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.
<b>Notice to reader:</b>	Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.