

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: 09/05/2020 Revision date: 23/05/2022 SDS Record Number: 60509646

1 .Identification of the material and supplier

Material name: I -20°C Transformer Oil (general)

Other means of identification:

Recommended use: Suitable for insulation and cooling medium in the oil-immersed transformer.

Restrictions on use:

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

International Lubricant Distributors Pty. Ltd. Supplier(Manufacturer):

Address: 21 Logistics Boulevard, Kenwick, WA 6107, Australia

Contact person(E-mail):

Telephone:

+61 8 9381 1788 Fax: **Emergency number:** 1300 558 939

New Zealand

Supplier(Manufacturer):

MTS ENERGY LTD

Address: PO BOX 302-133 North Harbour, Auckland 0751, New Zealand

Telephone: +64 9 480 8921 +64 9 480 8398 Fax:

Emergency number: 0800 399 993 (24 Hrs)

2. Hazards Identification

2.1 Classification of the substance/mixture:

2.1.1 Classification:

The mixture is classified as following according to REGULATION (EC) No 1272/2008:

REGULATION (EC) No 1272/2008	
Hazard classes/Hazard categories	Hazard codes
Aquatic Chronic 3	H412

For full text of H- phrases: see section 2.2.

2.2 label elements:

Hazard Pictograms: No hazard pictogram is used. Signal Word(S): No signal word is used.

Hazard Statement: H412: Harmful to aquatic life with long lasting effects.

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Precautionary statement: P273: Avoid release to the environment.

P501: Dispose of contents/container in accordance with local regulation.

2.3 Other hazards:

Not available.

3. Composition/information on ingredients

Substance/Mixture: Mixture

Ingredient(s):

Chemical Name	Registration No.	CAS No.	EC No.	Concentration	Classification
Distillates (petroleum), hydrotreated light paraffinic	01-2119487077-29-0041	64742-55-8	265-158-7	>79.6%	Not classified
Distillates(petroleum),solvent-refined light paraffinic	01-2119487067-30-0020	64741-89-5	265-091-3	<10%	Not classified
Lubricating oils (petroleum),C15-C30, hydrotreated neutral oil-based	01-2119474878-16-0008	72623-86-0	276-737-9	<10%	Not Classified
DBPC	01-2119565113-46-0010	128-37-0	204-881-4	<0.4%	H400 H410

4. First aid measures

4.1 Description of first aid measures:

In all cases of doubt, or when symptoms persist, seek medical attention.

4.1.1 In case of inhalation:

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.

4.1.2 In case of skin contact:

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.

4.1.3 In case of eyes contact:

No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.

4.1.4 In case of ingestion:

No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.

4.2 Most important symptoms and effects, both acute and delayed:

The product is not classified as harmful to human health effect.

4.3 Indication of any immediate medical attention and special treatment needed:

If skin irritation or rash occurs, get medical advice/attention.

5. Fire-Fighting measures

5.1 Extinguishing media:

Suitable extinguishing media: Spray, foam, fire extinguishers, carbon dioxide fire extinguisher, dry powder fire

extinguisher

Unsuitable extinguishing media: Do not water.

5.2 Special hazards arising from the

substance or mixture

This product has a flash point over $150\,^{\circ}\mathrm{C}$ and it belongs to non-dangerous products. When it meets fever case, the fire and strong oxidants, it can cause a fire. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved

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when this material undergoes combustion.

5.3 Advice for firefighters: Must wear breathing apparatus in confined spaces when close to the ignition point.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel:

Cut off the fire source, immediately contact the operating staff. Keep unrelated people rapidly evacuating to safe areas and isolation. As far as possible to cut off the source of leakage, prevent entering into sewers, drains, water and space. Refer to Chapter 8 of MSDS or the relevant fire-fighting procedures.

6.1.2 For emergency responders:

Wear an appropriate NIOSH/MSHA approved respirator if vapor is generated.

6.2 Environmental Precautions:

Before operating staff arrive at the scene, as much as possible to make the spilled material under control. For a small amount of leakage, use sawdust, sand, soil or other adsorbent to collect leaking liquid and place it in a sealed, liquid-proof container, waiting to be processed; For a large number of leakage, build a causeway or dig to collect it, Ensure that it does not flow into the sewers, rivers, water and lowlands. Place spilled material in appropriate container for disposal. Report to relevant departments when the soil and plant was polluted.

6.3 Methods for Containment and Cleaning up:

For a large number of leakage, Pump it into a container with a vacuum pump; For a small amount of leakage, use sawdust, sand, soil, oil-absorbing cotton or other adsorbent to prevent proliferation and load it into the sealed container for processing; For land leakage, take protective measures and cut off the sources of pollution, reduce to a minimum for the pollution of surface water; For waterway leakage, Immediately use the oil boom to prevent the loss of oil, warn the surrounding vessel and, when necessary, use suitable dispersants. If significant spillages can not be processed, should inform the local authorities.

6.4 Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

7. Handling and storage

7.1 Precautions for safe handling:

7.1.1 Protective measures:

Avoid long or repeated contact with skin, if contact, thoroughly wash it. If you are at risk of inhaling steam, spray or smoke, Please use local exhaust ventilation device. When transport, please lightly touch it to prevent the package and containers destroy.

7.1.2 Advice on general occupational hygiene:

Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities:

Keep the container sealing, do not store it into open container or container without labels. Keep it cool, dry and ventilate. Keep it from strong oxidant, fire, heat source and inflammable. Store it in normal temperature. Empty container may leave partly products, do not cut or weld, do not leave it in fire or high temperature.

7.3 Specific end use(s): Not applicable.

8. Exposure Controls/Personal Protection

8.1 Control parameters:

8.1.1 Occupational exposure limits:

Substance			Occupational Expo	sure Limit Value	Occupational	Exposure Lir	nit Value
			(8-hour reference period)		(15-minute reference period		
	EINECS	CAS No.	ppm	mg/ m3	ppm	mg/ m3	Notes
	No.						

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2,6-Ditertiary-butyl-pa	204-881-4	128-37-0	-	10	-	-	-
ra- cresol							

8.1.2 Additional exposure limits under

Not available.

the conditions of use:

8.1.3 DNEL/DMEL and PNEC-Values: Not available.

8.2 Exposure controls:

8.2.1Appropriate engineering controls: Use adequate ventilation to keep airborne concentrations low.

8.2.2 Individual protection measures, such as personal protective equipment:

Eye/face protection: No special eye protection is normally required. Where splashing is possible, wear

safety glasses with side shields as a good safety practice.

Hand protection: Suggested materials for protective gloves include: Neoprene, Nitrile Rubber.

Body protection: 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.

Respiratory protection: 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.

Thermal hazards: Wear suitable protective clothing to prevent heat.

8.2.3 Environmental exposure controls: Avoid discharge into the environment.

According to local regulations, Federal and official regulations.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance: Oil liquid

Colour: Transparent, colorless to pale yellow

Odour: Petroleum odor **Odour threshold:** Not available pH: Not available Melting point/range (°C): Not available

Pour point: -42°C (typical data)

Boiling point/range (°C): >250℃

Flash point (°C): 156°C (closed cup) (typical data)

Evaporation rate: Not available Flammability limit - lower (%): Not available Flammability (solid, gas): Not available Ignition temperature (°C): Not available **Upper/lower flammability/explosive limits:** Not available

<5kPa Vapour pressure (40°C):

Vapour density: Not available

Density: 838.8kg/m³ (20°C) (typical data)

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Bulk density (kg/m³): Not available

Water solubility (g/l): Insoluble in water

n-Octanol/Water (log Po/w): Not available

Auto-ignition temperature: $> 270^{\circ}$ C

Decomposition temperature: $> 280^{\circ}$ C

Kinematic viscosity: 9.972 mm/s² at 40 °C (typical data)

Explosive properties:

Oxidising properties:

Molecular Formula:

Molecular Weight:

Not available

Not available

9.2. Other information:

Fat solubility(solvent- oil to be specified) Not available

etc:

Surface tension:Not availableDissociation constant in water(pKa):Not availableOxidation-reduction Potential:Not available

DMSO extractable compounds < 3%

for base oil substance(s) according to IP346

10. Stability and reactivity

10.1 Reactivity: The substance is stable under normal storage and handling conditions.

10.2 Chemical stability: Stable at room temperature in closed containers under normal storage and

handling conditions.

10.3 Possibility of hazardous reactions: No dangerous reactions known.

10.4 Conditions to avoid: Incompatible materials. Avoid temperatures exceeding the flash point.

10.5 Incompatible materials: May react with strong acids or strong oxidizing agents, such as chlorates, nitrates,

peroxides, etc.

10.6 Hazardous decomposition products: Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or

low molecular weight hydrocarbons.

11. Toxicological information

11.1 Information on toxicological effects:

Acute toxicity:

LD50(Oral, Rat): Not available

LD50(Dermal, Rabbit): >5g/kg

LC50(Inhalation, Rat):

Skin corrosion/Irritation:

Not classified

Serious eye damage/irritation:

Not classified

Respiratory or skin sensitization:

Not classified

Germ cell mutagenicity:

Carcinogenicity:

Not classified

Not classified

Not classified

Not classified

STOT- single exposure: Not classified STOT-repeated exposure: Not classified

Aspiration hazard: Not classified

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12. Ecological information

12.1 Toxicity:

DBPC (CAS#128-37-0)

Acute t	oxicity	Time	Species	Method	Evaluation	Remarks
LC50	1.1 mg/L	96h	Fish	OECD 203	N/A	N/A
EC50	0.48 mg/L	48h	Daphnia	OECD 202	N/A	N/A
EC50	> 7 mg/L	72h	Algae	OECD 201	N/A	N/A

12.2 Persistence and degradability: This material is not expected to be readily biodegradable.

12.3 Bioaccumulative potential: This material has bioaccumulation potential component. 12.4 Mobility in soil: The material will be adsorbed to soil and not be mobile.

12.5 Results of PBT&vPvB assessment: Not available.

12.6 Other adverse effects: Harmful to aquatic life with long lasting effects.

13. Disposal considerations

13.1 Waste treatment methods: The material should be disposed of by incineration in a chemical incinerator in

compliance with national and regional requirements.

14. Transport information						
	Land transport(ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)			
UN-Number	Not regulated	Not regulated	Not regulated			
UN Proper shipping name	Not regulated	Not regulated	Not regulated			
Transport hazard Class	Not regulated	Not regulated	Not regulated			
Packaging group	Not regulated	Not regulated	Not regulated			
Environmental hazards	No	No	No			
Special precautions for user	See section 2.2	See section 2.2	See section 2.2			
Transport in bulk according to Annex II of Marpol and the IBC Code	Not regulated	Not regulated	Not regulated			

15. Regulation information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

Relevant information regarding authorization: Not applicable. Relevant information regarding restriction: Not applicable.

Other EU regulations: Employment restrictions concerning young person must be observed.

For use only by technically qualified individuals.

Other National regulations: Not applicable

15.2 Chemical Safety Assessment has been carried out? YES NO

16. Other information

Indication of changes: Version 1.1 Date of preparation or review: 2022.05.23 Training instructions: Not applicable.

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Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Notice to reader:

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 anyother product or process, is the responsibility of the user.

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