

# Safety Data Sheet ( S D S )

Sample Description	Heat-transfer oil L-QB 300
Applicant	Ningbo Lituo Oil Products Co., Ltd.



Product name: Heat-transfer oil  
Revised time: /

Report ID: BPIL968U218605U3  
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## Safety Data Sheet (SDS)

According to (EC) NO. 1907/2006 (REACH), Annex II

Heat-transfer oil

### Section 1: Identification

**Chemical Product name:** Heat-transfer oil

**Alternative names:** Heat-transfer oil

**Company product code:** L-QB 300

**Recommended use:** Use for oil tincture.

**Restrictions on use:** --

**Supplier name:** China Petroleum & Chemical Corporation Jinan Branch

**Address:** No. 26, Industrial South Road, Lixia District, Jinan City, Shandong Province, 250101, P.R. China

**Phone number:** +86 (531) 8832 376

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**Emergency phone number:** +86 (531) 8832 376

### Section 2: Hazard identification

**Classification of the substance:**

Aspiration hazard: Category 1

**GHS label elements:**

**pictogram(s):**



**Signal word:** Danger

**Hazard statement(s):**

H304 May be fatal if swallowed and enters airways

**Precautionary statement(s):**

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**•Prevention:**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

**•Response:**

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P331 Do NOT induce vomiting.

**•Storage:**

P405 Store locked up.

**•Disposal:**

P501 Dispose of contents and container in accordance with national regulations.

**Other Hazards:**

Combustible. On combustion, forms toxic gases including carbon monoxide. Reacts with strong oxidants.

If this liquid is swallowed, aspiration into the lungs may result in chemical pneumonitis.

Toxic to aquatic life.

### Section 3: Composition/information on ingredients

Mixture.

Chemical Name	CAS No.	Percent (by weight)	EC No.	Classification according to regulation (EC) No 1272/2008 [CLP]
White mineral oil (petroleum)	8042-47-5	97	232-455-8	Asp. Tox. 1
2,6-di-tert-butyl-p-cresol	128-37-0	2	204-881-4	Aquatic Acute 1 Aquatic Chronic 1
2-ethylhexyl nitrate	27247-96-7	1	248-363-6	Aquatic Chronic 2

### Section 4: First-aid measures

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<b>Inhalation</b>	IF INHALED: remove person to fresh air and keep comfortable for breathing. Get medical help if you feel unwell.
<b>Skin Contact</b>	IF ON SKIN: Wash with plenty of water and soap. If skin irritation occurs: Get medical help.
<b>Eye Contact</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical help.
<b>Ingestion</b>	IF SWALLOWED: Get emergency medical help immediately. Do NOT induce vomiting.

**Personal protective equipment for first-aid responders:**

Use proper personal protective equipment as indicated in Section 8.

**Most important symptoms/effects, acute and delayed:**

The symptoms of chemical pneumonitis do not become manifest until few hours or even after days have passed. Refer for medical attention if breathing difficulties and/or fever develop. See Section 11 for more information.

**Indication of immediate medical attention and special treatment needed:**

Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

**Section 5: Fire-fighting measures**

**Suitable extinguishing media:** Foam (Specifically trained personnel only), Water fog (Specifically trained personnel only), Dry chemical powder, Carbon dioxide, Other inert gases (subject to regulations), Sand or earth.

**Unsuitable extinguishing media:**

Do not use direct water jets on the burning product; they could cause splattering and spread the fire.

Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

**Specific Hazards arising from the chemical:**

Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates and gases, including carbon monoxide and unidentified

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organic and inorganic compounds.

Combustion products include:

- carbon monoxide (CO)
- carbon dioxide (CO<sub>2</sub>).

**Specific protective actions for fire-fighters:**

Alert Fire Brigade and tell them location and nature of hazard.

Keep unauthorized personnel away.

Stay upwind, uphill and/or upstream.

Keep out of low areas.

Prevent, by any means available, spillage from entering drains or water courses.

Cool fire exposed containers with water spray from a protected location.

For massive fire, use unmanned master stream devices or monitor nozzles.

Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.

ALWAYS stay away from tanks engulfed in fire.

If safe to do so, remove containers from path of fire.

Equipment should be thoroughly decontaminated after use.

Wear positive pressure self-contained breathing apparatus (SCBA).

Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.

Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

## Section 6: Accidental release measures

**Person-related Safety Precautions:** See section 8.

**Measures for Environmental Protection:** See section 12.

**Measures for Cleaning/Collecting:**

➤ SMALL SPILLS

Collect leaking and spilled liquid in covered containers as far as possible.

Absorb remaining liquid in sand or inert absorbent.

Store and dispose of according to local regulations.

➤ LARGE SPILLS:

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Do not touch or walk through spilled material.  
Stop or contain leak at the source if safe to do so.  
Stay upwind.  
Keep non-involved personnel away from the area of spillage.  
Alert emergency personnel.  
Local experts should be consulted.  
Eliminate all ignition sources.  
Prevent product from entering sewers, rivers, waterways or other bodies of water  
If necessary dike the product with dry earth, sand or similar non-combustible materials.  
Large spillages may be cautiously covered with foam, if available, to limit fire risk.  
Do not use direct jets  
When inside buildings or confined space, ensure adequate ventilation.  
Absorb spilled product with suitable non-combustible materials.  
Collect free product with suitable means.  
Transfer collected product and other contaminated materials to suitable tanks or containers for recycle, recovery or safe disposal.  
In case of soil contamination, remove contaminated soil for remediation or disposal according to local regulations.

## Section 7: Handling and storage

### **Precautions for safe handling:**

If medical advice is needed, have product container or label at hand.  
Keep out of reach of children.  
Read carefully and follow all instructions.  
Ensure that all relevant regulations regarding handling and storage facilities of combustible products are followed.  
NO open flames, NO sparks and NO smoking.  
Use and store only outdoors or in a well-ventilated area.  
Avoid release to the environment.  
Take precautionary measures against static electricity.  
Avoid splash filling of bulk volumes when handling hot liquid product  
Avoid contact with skin.

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Avoid breathing fume/mist.  
Do not ingest.  
Prevent the risk of slipping.  
Use adequate personal protective equipment as required.  
Use good occupational work practice.  
Do not eat, drink or smoke while using this product.  
Wash the hands thoroughly after handling.  
Contaminated materials should not be allowed to accumulate in the workplaces and should never be kept inside the pockets.  
Wash contaminated clothing before reuse.  
Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

**Conditions for safe storage:**

Storage in accordance with national, local regulations.  
Keep only in the original container.  
Store separately from oxidising agents.  
Keep away from food and beverages.  
Keep containers tightly closed and properly labelled.  
Store locked up.  
The storage area should be equipped with the corresponding species and quantity of fire-fighting equipments and emergency equipment.  
Do not weld, solder, drill, cut or perform similar operations unless they have been properly cleaned.

**Section 8: Exposure controls/personal protection**

**Control parameters**

CAS No.	DNELs Exposure Pattern Worker	PNECs Compartment
8042-47-5	INHALATION Exposure Long-term: 164.56 mg/m <sup>3</sup> (Systemic effects) DERMAL Exposure Long-term: 217.05 mg/kg	Freshwater: no data available: testing technically not feasible Freshwater (intermittent releases): -- Marine water: no data available:

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	<p>bw/day(Systemic effects) EYE Exposure no hazard identified (Local effects)</p>	<p>testing technically not feasible STP: no data available: testing technically not feasible Sediment (freshwater): no data available: testing technically not feasible Sediment (marine water): no data available: testing technically not feasible Air: no hazard identified Soil: no data available: testing technically not feasible Secondary poisoning: insufficient hazard data available</p>
128-37-0	<p>INHALATION Exposure Long-term: 1.76 mg/m<sup>3</sup> (Systemic effects) DERMAL Exposure Long-term: 0.5 mg/kg bw/day (Systemic effects) EYE Exposure no hazard identified (Local effects)</p>	<p>Freshwater: 0.199 µg/L Freshwater (intermittent releases): 1.99 µg/L Marine water: 0.02 µg/L STP: 0.017 mg/L Sediment (freshwater): 0.458 mg/kg sediment dw Sediment (marine water): 0.046 mg/kg sediment dw Air: no hazard identified Soil: 0.054 mg/kg soil dw Secondary poisoning: 16.67 mg/kg food</p>
27247-96-7	<p>INHALATION Exposure Long-term: 0.35 mg/m<sup>3</sup> (Systemic effects) DERMAL Exposure Long-term: 1 mg/kg bw/day (Systemic effects) Long-term: 44 µg/cm<sup>2</sup> (Local effects) EYE Exposure low hazard (no threshold derived) (Local effects)</p>	<p>Freshwater: 0.8 µg/L Freshwater (intermittent releases):-- Marine water: 0.08 µg/L STP: 10 mg/L Sediment (freshwater): 0.74 µg/kg sediment dw Sediment (marine water): 0.74 µg/kg sediment dw Air: no hazard identified Soil: 0.191 µg/kg soil dw Secondary poisoning: no data available: testing technically not feasible</p>

• Occupational exposure limits:



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CAS No.	Long-term exposure limit (8-hr TWA) mg/m <sup>3</sup>	Short-term exposure limit (15-minute) mg/m <sup>3</sup>	Comments
8042-47-5	No data available	No data available	--
128-37-0	10	--	--
27247-96-7	No data available	--	--

**Appropriate engineering controls:**

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

The design of a ventilation system must match the particular process and chemical or contaminant in use.

Dust explosion-proof electrical equipment and lighting.

**Personal protective equipment:**

**Eyes Protection:**

Safety glasses with side shields.

Chemical goggles.

Eye wash unit.

**Skin and Body Protection:**

Normal antistatic working clothes.

Full body suit of chemically resistant and antistatic material.

Work helmet.

Antistatic non-skid safety shoes or boots.

Overalls.

P.V.C. apron.

**Respiratory Protection:**

No special requirement under normal conditions.

Respiratory protection will be necessary only in special cases (e.g. formation of mists). A half or full-face respirator with combined dust/organic vapour filter(s), or a Self-Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.

**Hand Protection:**

Chemical protective gloves (specifically to hydrocarbons).

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**Thermal hazards:** No data available.

## Section 9: Physical and chemical properties

**Physical State/ Colour:** Light yellow liquids

**Odour:** No data available

**Melting range/ Freezing Point:** No data available

**Boiling point or initial boiling point and boiling range:** No data available

**Explosive limits, vol% in air:** No data available

**Flash Point (°C):** >95°C (Closed cup)

**Auto-ignition Temperature:** No data available

**Decomposition temperature:** No data available

**pH:** No data available

**Kinematic viscosity:** No data available

**Solubility in Water:** No data available

**Partition coefficient: n-octanol/water:** No data available

**Vapor Pressure:** No data available

**Density / Relative density:** No data available

**Relative vapor density:** No data available

**Particle characteristics:** No data available

**Flammability (solid, gas):** No data available

**Other:--**

## Section 10: Stability and reactivity

**Reactivity:** Reacts with strong oxidants.

**Chemical Stability:** The product is stable under normal conditions.

**Conditions to Avoid:** see section 7.

**Incompatibilities with Other Materials:** Oxidants.

**Hazardous Decomposition Products:** see section 5.

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## Section 11 – Toxicological information

### Acute toxicity:

CAS No.	LD <sub>50</sub> /LC <sub>50</sub>
8042-47-5	LD <sub>50</sub> >5000 mg/kg rat oral LD <sub>50</sub> >2000 mg/kg rabbit dermal 4hr LC <sub>50</sub> > 5 mg/L rat inhalation
128-37-0	LD <sub>50</sub> =890 mg/kg Rat oral LD <sub>50</sub> >2000 mg/kg rat dermal
27247-96-7	No data available

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

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

**Respiratory or Skin sensitisation:** No data available.

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

**Carcinogenicity:** No data available.

**Reproductive toxicity:** No data available.

**Specific target organ toxicity-Single exposure:** No data available.

**Specific target organ toxicity-Repeated exposure:** No data available.

### Aspiration hazard:

CAS#8042-47-5

If this liquid is swallowed, aspiration into the lungs may result in chemical pneumonitis.

(ICSC)

## Section 12 - Ecological information

### Toxicity:

CAS No	Ecological Toxicity
8042-47-5	No data available
128-37-0	96hr LC <sub>50</sub> for fish =0.199 mg/L

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	NOEC for = 0.053mg/L 48hr LC <sub>50</sub> for crustacean = 0.48 mg/L NOEC for crustacean =0.069 mg/L 96hr EC <sub>50</sub> for algae or other aquatic plants = 0.758 mg/L NOEC for algae or other aquatic plants =0.24 mg/L
27247-96-7	96hr LC <sub>50</sub> for fish =2.0 mg/L NOEC for fish =1.52mg/L 48hr LC <sub>50</sub> for crustacean > 12.6mg/L

**Persistence and degradability:** No data available.

**Bioaccumulative Potential:**

CAS#128-37-0

BCF=1277

(ECHA)

**Mobility in Soil:** No data available.

**Other adverse effects:** No data available.

## Section 13 - Disposal considerations

**Disposal method:**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

The generation of waste should be avoided or minimized wherever possible.

**Contaminated Packaging:**

Contaminated packaging material should be treated equivalent to residual chemical. Clean packaging material should be subjected to waste management schemes (recovery recycling, reuse) according to local legislation. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14 - Transport information

**Air transport (IATA /DGR62<sup>nd</sup>)**

UN Number: --

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Proper Shipping Name (PSN): --  
Class or division: --  
Subsidiary Hazard: --  
Packaging group: --  
Packing Label/Mark:--  
Other Information: --

**Sea transport (IMDG CODE 39-18 edition)**

UN Number: --  
Proper Shipping Name(PSN): --  
Class or division: --  
Subsidiary hazard: --  
Marine Pollutant (Y/N): N  
UN Packing group: --  
Packing Label/Mark: --  
Other Information: --  
Special precautions for user: --

**Land transport (TDG21<sup>st</sup>)**

UN Number: --  
Proper Shipping Name(PSN):--  
Class or division: --  
Subsidiary hazard: --  
UN Packing group: --  
Packing Label/Mark: --  
Other Information: --

**Section 15: Regulatory information**

**Safety, health and environmental regulations specific for the product in question**

CAS No.	TSCA	IECSC	EINECS	DSL/NDSL
8042-47-5	Listed	Listed	Listed	DSL

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128-37-0	Listed	Listed	Listed	DSL
27247-96-7	Listed	Listed	Listed	DSL

## Section 16 – Other information

**Issue Time:** 2021-08-11

**Issue Department:** Technical department

**Modification record:**

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

**Other Information:**

**CAS:** (Chemical Abstracts Service);

**DNELs:** Derived No- or Minimal Effect Level (DN(M)EL) ;

**EC:** (European Commission);

**ACGIH:** (American Conference of Governmental Industrial Hygienists);

**NIOSH:** (US National Institute for Occupational Safety and Health);

**OSHA:** (US Occupational Safety and Health);

**TLV:** (Threshold Limit Value);

**TWA:** (Time Weighted Average);

**STEL:** (Short Term Exposure Limit);

**PEL:** (Permissible Exposure Level);

**REL:** (Recommended Exposure Limit);

**PC-STEL:** (Permissible concentration-time weighted average);

**PC-TWA:** (Permissible concentration-short time exposure limit);

**PNECs:** Predicted No-Effect Concentration;

**LC50:** (Lethal concentration, 50 percent kill);

**LD50:** (Lethal dose, 50 percent kill);

**IARC:** (International Agency for Research on Cancer);

**EC50:** (Median effective concentration);

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**BCF:** (Bioconcentration Factor);  
**BOD:** (Biochemical oxygen demand);  
**NOEC:** (No observed effect concentration);  
**NTP:** (US National Toxicology Program);  
**RTECS:** (Registry of Toxic Effects of Chemical Substances);  
**IATA:** (International Air Transport Association);  
**IMDG:** (International Maritime Dangerous Goods);  
**TDG:** (Recommendations on the TRANSPORT OF DANGEROUS GOODS Model Regulations);  
**TOC:** (Total Organic Carbon);  
**TSCA:** (Toxic Substances Control Act of USA);  
**DSL:** (the Domestic Substances List of Canada);  
**NDSL:** (the Non-domestic Substances List of Canada)

\*\*\*End of report \*\*\*

