Safety Data Sheet (SDS) Report

SDS number: **OCM201802080-001**

Applicant: Jinan Branch, Sinopec Lubricant co.,LTD.
No.34 South Industry Road,Gaoxin District,Jinan City,
ShanDong Province,China.

Issue Date: 2018-06-20

Sample Description:

The sample information was submitted and identified on client's behalf to be:

Product Name	:	Heat Transfer Fluid for Electric Heater
Physical State	:	Liquid
Data Received	:	Jun 13,2018
Data Reviewed	:	Jun 20,2018

Service Requested:

Based on the information provided by the applicant, the Safety Data Sheet (SDS) was generated according to requirements of Regulation (EC) No 1907/2006 (REACH) with its amendment Commission Regulation (EU) 2015/830, Regulation (EC) No 1272/2008, for details please refer to attached pages.

Authorized By:

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SINOPEC | 长城润滑油

Safety Data Sheet

Heat Transfer Fluid for Electric Heater

Jinan Branch, Sinopec Lubricant co.,LTD.

SDS number:**OCM201802080-001**

Version No:**1.0**
According to Regulation (EC) No 1907/2006(REACH) with its amendment Commission Regulation (EU) 2015/830

Issue Date:**20/06/2018**
REACH.DEU.EN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1. Product Identifier

Product name	Heat Transfer Fluid for Electric Heater
Synonyms	Not Available
Other means of identification	Not Available

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Suitable for Electrothermal Oil Heater
Uses advised against	Not Applicable

1.3. Details of the supplier of the safety data sheet

Supplier name	**Jinan Branch, Sinopec Lubricant co.,LTD.**
Address	No.34 South Industry Road, Gaoxin District, Jinan City, ShanDong Province, China.
Telephone	+86-531-88834055
Emergency telephone	+86-531-88834078
Email	rhyjnfgs2002@sina.com
Importer name	EUROMATE GmbH/Emil Lux GmbH & Co. KG
Address	Emil-Lux-Strasse 1 42929 Wermelskirchen GERMANY
Telephone	+49(0)2196/76-4343 / +49(0)2196/76-4000
Email	kenny.li@obisourcing.com

1.4. Emergency telephone number

Association / Organisation	**EUROMATE GmbH/Emil Lux GmbH & Co. KG**
Emergency telephone numbers	**+49(0)2196/76-4343（9:00-17:00 Monday-Friday）/ +49(0)2196/76-4000（9:00-17:00 Monday-Friday）**
Other emergency telephone numbers	

SECTION 2 HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Considered a hazardous mixture according to Reg. (EC) No 1272/2008 and their amendments. Not classified as Dangerous Goods for transport purposes.

Classification according to regulation (EC) No 1272/2008 [CLP]	H412 - Chronic Aquatic Hazard Category 3

2.2. Label elements

Hazard pictogram(s)	Not Applicable
SIGNAL WORD	**NOT APPLICABLE**

Hazard statement(s)

H412	Harmful to aquatic life with long lasting effects.

Supplementary statement(s)

Not Applicable

CLP classification (additional)

Not Applicable

Precautionary statement(s) Prevention

P273	Avoid release to the environment.

Continued...

Precautionary statement(s) Response

Not Applicable

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

P501	Dispose of contents/container in accordance with local regulations.

2.3. Other hazards

REACh - Art.57-59: The mixture does not contain Substances of Very High Concern (SVHC) at the SDS print date.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

3.1.Substances

See 'Composition on ingredients' in Section 3.2

3.2.Mixtures

1.CAS No 2.EC No 3.Index No 4.REACH No	%[weight]	Name	Classification according to regulation (EC) No 1272/2008 [CLP]
1.64742-65-0 2.265-169-7 3.649-474-00-6 4.Not Available	98-99.9	distillates (petroleum), solvent-dewaxed heavy paraffinic	Not Classified
1.122-39-4 2.204-539-4 3.612-026-00-5 4.Not Available	0.1-2	diphenylamine	Acute Toxicity (Oral) Category 3, Acute Toxicity (Inhalation) Category 3, Acute Toxicity (Dermal) Category 3, Specific target organ toxicity - repeated exposure Category 2, Acute Aquatic Hazard Category 1, Chronic Aquatic Hazard Category 1; H301, H331, H311, H373, H400, H410

SECTION 4 FIRST AID MEASURES

4.1. Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: ▸ Wash out immediately with fresh running water. ▸ Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. ▸ Seek medical attention without delay; if pain persists or recurs seek medical attention. ▸ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin or hair contact occurs: ▸ Flush skin and hair with running water (and soap if available). ▸ Seek medical attention in event of irritation.
Inhalation	▸ If fumes, aerosols or combustion products are inhaled remove from contaminated area. ▸ Other measures are usually unnecessary.
Ingestion	▸ Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. ▸ Seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11

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

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

5.1. Extinguishing media

Sprinkling or spraying, foam fire extinguisher, carbon dioxide fire extinguisher, dry powder fire extinguisher. Sand is only suitable for small fires.

5.2. Special hazards arising from the substrate or mixture

Fire Incompatibility	▸ Water

5.3. Advice for firefighters

Fire Fighting	▸ Alert Fire Brigade and tell them location and nature of hazard. ▸ Wear full body protective clothing with breathing apparatus.
Fire/Explosion Hazard	▸ Combustible. ▸ Slight fire hazard when exposed to heat or flame. Incomplete combustion produces: carbon monoxide(CO) carbon dioxide (CO_2) nitrogen oxides(NOx)

Continued...

	sulfur oxides (SOx) aldehyde phosphate Some metal oxides and other decomposition components.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Cut off the source of fire and immediately contact the operator to allow the irresponsible personnel to quickly evacuate to safe areas and isolate them. Cut off sources of leakage as much as possible to prevent entry into sewers, drains, water bodies, etc.
See section 8

6.2. Environmental precautions

Before the operator arrives at the site, limit spilled substances as much as possible. A small amount of leakage, using sawdust, sand, soil or other absorbents to collect the spilled fluid and place it in a closed, leak-proof container for treatment; for large spills, construct a dike or dig pit collection to ensure that it does not flow into the sewer, Rivers, water sources and lowlands. Spilled material is disposed of in a suitable container. Contamination of soil and plants should be reported to relevant departments.

6.3. Methods and material for containment and cleaning up

Minor Spills	Use sawdust, sand, earth, absorbent cotton or other absorbents to prevent diffusion and pack in sealed containers.
Major Spills	Vacuum pump into the container.

6.4. Reference to other sections

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

7.1. Precautions for safe handling

Safe handling	Operators must be specially trained to strictly observe operating regulations. Avoid contact with oxidants. Equipped with a corresponding number of fire-fighting equipment and leakage emergency treatment equipment. Wear protective shoes when loading and unloading 200 litre drums. Empty containers may be harmful residues.
Fire and explosion protection	See section 5
Other information	Keep the container tightly closed. Do not store it in open or unlabeled containers. Store in a cool, dry, ventilated place away from strong oxidants, ignition sources, heat sources, and flammable materials. Store at room temperature. The empty container may still leave part of the product. Do not cut, weld, or expose it to high temperatures or flames.

7.2. Conditions for safe storage, including any incompatibilities

Suitable container	▸ Metal barrel ▸ Check all containers are clearly labelled and free from leaks.
Storage incompatibility	Keep away from strong oxidants, ignition sources, heat sources, and combustibles.

7.3. Specific end use(s)

See section 1.2

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

DERIVED NO EFFECT LEVEL (DNEL)

Not Available

PREDICTED NO EFFECT LEVEL (PNEC)

Not Available

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Germany Recommended Exposure Limits - MAK Values (English)	distillates (petroleum), solvent-dewaxed heavy paraffinic	White mineral oil (pharmaceutical)	5 mg/m3	II(4) ppm	Not Available	Not Available
Germany TRGS 900 - Limit Values for the Workplace Atmosphere (German)	distillates (petroleum), solvent-dewaxed heavy paraffinic	Weißes Mineralöl (Erdöl)	5 mg/m3	Not Available	Not Available	(Limit value mg/m3 (A))
Germany Recommended Exposure Limits - MAK Values (English)	diphenylamine	Diphenylamine	5 mg/m3	II(2) ppm	Not Available	Not Available
Germany TRGS 900 - Limit Values for the Workplace Atmosphere (German)	diphenylamine	Diphenylamin	5 mg/m3	Not Available	Not Available	(Limit value mg/m3 (E))

8.2. Exposure controls

8.2.1. Appropriate engineering controls	Provide exhaust ventilation or other engineering controls to ensure that the concentration of relevant substances in the air is below the standard

Continued...

8.2.2. Personal protection	
Eye and face protection	▸ Safety glasses with side shields ▸ Chemical goggles. ▸ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants.
Skin protection	Under normal conditions of use, no special skin and body protection equipment is required in addition to ordinary work clothes. When there is a possibility of splashing, please select suitable and permeability safety clothing and safety shoes according to the actual situation in the workplace. The recommended material is nitrile rubber.
Hands/feet protection	Use oil-resistant, chemical-resistant protective gloves. Nitrile rubber, neoprene, PVC gloves are recommended. Replace contaminated gloves promptly. Wash thoroughly with soap and water after operation. When there is a possibility of splashing, please select suitable and permeability safety clothing and safety shoes according to the actual situation in the workplace. The recommended material is nitrile rubber.
Body protection	See Other protection below
Other protection	▸ Overalls. ▸ P.V.C.

Respiratory protection

There is no need to wear respiratory protective equipment under normal conditions of use. If the engineering control facility does not maintain the concentration of oil mist at a level sufficient to protect the health of the relevant personnel, respiratory protection equipment that meets the relevant regulatory requirements must be selected. For details, consult your respiratory protection equipment supplier.

8.2.3. Environmental exposure controls

See section 12

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Pale yellow transparent liquid

Physical state	Liquid	**Relative density (Water = 1)**	0.8552
Odour	Not Available	**Partition coefficient n-octanol / water**	Not Available
Odour threshold	Not Available	**Auto-ignition temperature (°C)**	Not Available
pH (as supplied)	Not Available	**Decomposition temperature**	300
Melting point / freezing point (°C)	-24	**Viscosity (cSt)**	34（40°C）
Initial boiling point and boiling range (°C)	Not Available	**Molecular weight (g/mol)**	Not Available
Flash point (°C)	231	**Taste**	Not Available
Evaporation rate	Not Available	**Explosive properties**	Not Available
Flammability	Not Flammable	**Oxidising properties**	Not Available
Upper Explosive Limit (%)	Not Available	**Surface Tension (dyn/cm or mN/m)**	Not Available
Lower Explosive Limit (%)	Not Available	**Volatile Component (%vol)**	Not Available
Vapour pressure (kPa)	Not Available	**Gas group**	Not Available
Solubility in water (g/L)	Not Available	**pH as a solution (1%)**	Not Available
Vapour density (Air = 1)	Not Available	**VOC g/L**	Not Available

9.2. Other information

Not Available

SECTION 10 STABILITY AND REACTIVITY

10.1.Reactivity	See section 7.2
10.2. Chemical stability	▸ Unstable in the presence of incompatible materials. ▸ Product is considered stable.
10.3. Possibility of hazardous reactions	See section 7.2
10.4. Conditions to avoid	Extreme temperatures, sun exposure, exposure to strong oxidants, ignition sources
10.5. Incompatible materials	Strong oxidants
10.6. Hazardous decomposition products	No dangerous decomposition products will form under normal storage conditions

SECTION 11 TOXICOLOGICAL INFORMATION

Continued...

11.1. Information on toxicological effects

Acute Toxicity	Low toxicity is expected. Dermal (rabbit) LD50: >5000 mg/kg[2] Inhalation (rat) LC50: >10 mg/l4 h[2] Oral (rat) LD50: >5000 mg/kg[2] distillates (petroleum), solvent-dewaxed heavy paraffinic Dermal (rabbit) LD50: >2000 mg/kg[1] Inhalation (rat) LC50: >3.9 mg/l4 h[1] Oral (rat) LD50: >2000 mg/kg[1] diphenylamine Oral (hamster) LD50: ~600 mg/kg[1]
Skin Irritation/Corrosion	It is expected to be slightly irritating. Prolonged or constant contact with the skin, and improper cleaning may cause inflammation of the skin.
Serious Eye Damage/Irritation	It is expected to be slightly irritating.
Respiratory or Skin sensitisation	Not expected to be a skin allergen
Mutagenicity	No mutagenic danger
Carcinogenicity	No cancer danger
Reproductivity	No prospective hazard
STOT - Single Exposure	No prospective hazard
STOT - Repeated Exposure	No prospective hazard
Aspiration Hazard	Inhalation of steam or oil mist may feel slightly irritating.
Legend:	*1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances*

SECTION 12 ECOLOGICAL INFORMATION

12.1. Toxicity

Heat Transfer Fluid for Electric Heater

ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
Not Available	Not Available	Not Available	Not Available	Not Available

distillates (petroleum), solvent-dewaxed heavy paraffinic

ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
EC50	48	Crustacea	>1000mg/L	1
EC50	96	Algae or other aquatic plants	>1000mg/L	1
NOEC	504	Crustacea	>1mg/L	1

diphenylamine

ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
LC50	96	Fish	3.79mg/L	4
EC50	48	Crustacea	0.31mg/L	4
EC50	72	Algae or other aquatic plants	0.048mg/L	1
BCF	768	Fish	0.0437mg/L	4
NOEC	504	Crustacea	0.16mg/L	1

Legend: *Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data*

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
diphenylamine	LOW (Half-life = 56 days)	Not Available

12.3. Bioaccumulative potential

Continued...

Ingredient	Bioaccumulation
diphenylamine	LOW (BCF = 253)

12.4. Mobility in soil

Ingredient	Mobility
diphenylamine	LOW (KOC = 1887)

12.5.Results of PBT and vPvB assessment

	P	B	T
Relevant available data	Not Available	Not Available	Not Available
PBT Criteria fulfilled?	Not Available	Not Available	Not Available

12.6. Other adverse effects

No data available

SECTION 13 DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product / Packaging disposal	Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. ▸ **DO NOT** allow wash water from cleaning or process equipment to enter drains. ▸ It may be necessary to collect all wash water for treatment before disposal. ▸ Recycle wherever possible or consult manufacturer for recycling options. ▸ Consult State Land Waste Authority for disposal.
Waste treatment options	Not Available
Sewage disposal options	Not Available

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	NO

Land transport (ADR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. **UN number**	Not Applicable
14.2. **UN proper shipping name**	Not Applicable
14.3. **Transport hazard class(es)**	Class: Not Applicable Subrisk: Not Applicable
14.4. **Packing group**	Not Applicable
14.5. **Environmental hazard**	Not Applicable
14.6. **Special precautions for user**	Hazard identification (Kemler): Not Applicable Classification code: Not Applicable Hazard Label: Not Applicable Special provisions: Not Applicable Limited quantity: Not Applicable

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. **UN number**	Not Applicable
14.2. **UN proper shipping name**	Not Applicable
14.3. **Transport hazard class(es)**	ICAO/IATA Class: Not Applicable ICAO / IATA Subrisk: Not Applicable ERG Code: Not Applicable
14.4. **Packing group**	Not Applicable
14.5. **Environmental hazard**	Not Applicable
14.6. **Special precautions for user**	Special provisions: Not Applicable Cargo Only Packing Instructions: Not Applicable Cargo Only Maximum Qty / Pack: Not Applicable Passenger and Cargo Packing Instructions: Not Applicable Passenger and Cargo Maximum Qty / Pack: Not Applicable Passenger and Cargo Limited Quantity Packing Instructions: Not Applicable

Continued...

	Passenger and Cargo Limited Maximum Qty / Pack	Not Applicable

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. **UN number**	Not Applicable	
14.2. **UN proper shipping name**	Not Applicable	
14.3. **Transport hazard class(es)**	IMDG Class	Not Applicable
	IMDG Subrisk	Not Applicable
14.4. **Packing group**	Not Applicable	
14.5. **Environmental hazard**	Not Applicable	
14.6. **Special precautions for user**	EMS Number	Not Applicable
	Special provisions	Not Applicable
	Limited Quantities	Not Applicable

Inland waterways transport (ADN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. **UN number**	Not Applicable	
14.2. **UN proper shipping name**	Not Applicable	
14.3. **Transport hazard class(es)**	Not Applicable	Not Applicable
14.4. **Packing group**	Not Applicable	
14.5. **Environmental hazard**	Not Applicable	
14.6. **Special precautions for user**	Classification code	Not Applicable
	Special provisions	Not Applicable
	Limited quantity	Not Applicable
	Equipment required	Not Applicable
	Fire cones number	Not Applicable

14.7. Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

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

DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC(64742-65-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS

EU REACH Regulation (EC) No 1907/2006 - Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles
EU REACH Regulation (EC) No 1907/2006 - Annex XVII (Appendix 2) Carcinogens: category 1B (Table 3.1)/category 2 (Table 3.2)
European Customs Inventory of Chemical Substances ECICS (English)
European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)
European Union (EU) Annex I to Directive 67/548/EEC on Classification and Labelling of Dangerous Substances - updated by ATP: 31
European Union (EU) Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures - Annex VI
Germany Recommended Exposure Limits - MAK Values - Pregnancy Risk Group Classifications & Germ Cell Mutagens
Germany Recommended Exposure Limits - MAK Values (English)
Germany TRGS 900 - Limit Values for the Workplace Atmosphere (German)

DIPHENYLAMINE(122-39-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS

European Customs Inventory of Chemical Substances ECICS (English)
European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)
European Union (EU) Annex I to Directive 67/548/EEC on Classification and Labelling of Dangerous Substances - updated by ATP: 31
European Union (EU) Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures - Annex VI
Germany Recommended Exposure Limits - MAK Values - Carcinogens
Germany Recommended Exposure Limits - MAK Values - Pregnancy Risk Group Classifications & Germ Cell Mutagens
Germany Recommended Exposure Limits - MAK Values (English)
Germany TRGS 900 - Limit Values for the Workplace Atmosphere (German)

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable - : Directives 98/24/EC, - 92/85/EEC, - 94/33/EC, - 2008/98/EC, - 2010/75/EU; Commission Regulation (EU) 2015/830; Regulation (EC) No 1272/2008 as updated through ATPs.

15.2. Chemical safety assessment

For further information please look at the Chemical Safety Assessment and Exposure Scenarios prepared by your Supply Chain if available.

15.3. Classification of Substances and Mixtures into Water Hazard Classes

PREPARATION IS WGK 3

Name	WGK	Score	Source
DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC	3		

Continued...

DIPHENYLAMINE	3		

SECTION 16 OTHER INFORMATION

Full text Risk and Hazard codes

H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H331	Toxic if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Other information

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.
For detailed advice on Personal Protective Equipment, refer to the following EU CEN Standards:
EN 166 Personal eye-protection
EN 340 Protective clothing
EN 374 Protective gloves against chemicals and micro-organisms
EN 13832 Footwear protecting against chemicals
EN 133 Respiratory protective devices

Definitions and abbreviations

PC—TWA: Permissible Concentration-Time Weighted Average
PC—STEL: Permissible Concentration-Short Term Exposure Limit
IARC: International Agency for Research on Cancer
ACGIH: American Conference of Governmental Industrial Hygienists
STEL: Short Term Exposure Limit
TEEL: Temporary Emergency Exposure Limit。
IDLH: Immediately Dangerous to Life or Health Concentrations
OSF: Odour Safety Factor
NOAEL :No Observed Adverse Effect Level
LOAEL: Lowest Observed Adverse Effect Level
TLV: Threshold Limit Value
LOD: Limit Of Detection
OTV: Odour Threshold Value
BCF: BioConcentration Factors
BEI: Biological Exposure Index

end of SDS