



SAFETY DATA SHEET

According to the Hazard Communication Standard, 29 CFR 1910.1200

SDS # : 083981

REFRIGERATION OIL 300

Date of the previous version: 2015-05-21

Revision Date: 2015-10-13

Version 2.01

1. IDENTIFICATION

Product identifier

Product name REFRIGERATION OIL 300

Other means of identification

Product Code(s) 083981

Number 86V
Substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Identified uses Refrigerant. Oil. refrigerating compressors.

Uses advised against Do not use for any purpose other than the one for which it is intended

Details of the supplier of the safety data sheet

Supplier Address TOTAL Specialties USA Inc
1201 Louisiana Street, Suite 1800
Houston, TX 77002
Phone: +1 800 323 3198

Contact Point Technical/ HSEQ

E-mail Address USRMLIN-info@total.com

Emergency telephone number

Company Phone Number +1 (908) 862-9300
Emergency telephone CHEMTREC: +1 800 424 9300 (24h)

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label elements

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Version GNAM



SDS # : 083981

REFRIGERATION OIL 300

Date of the previous version: 2015-05-21

Revision Date: 2015-10-13

Version 2.01

Unknown Acute Toxicity

Not applicable

Hazards not otherwise classified (HNOC)

None known

Other information

Physical-Chemical Properties Contaminated surfaces will be extremely slippery.

Environmental properties Should not be released into the environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). The product contains no substances which at their given concentration, are considered to be hazardous to health.

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice	IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.
Eye contact	Rinse immediately with plenty of water and seek medical advice.
Skin contact	Remove contaminated clothing and shoes. Wash off with soap and water. Wash contaminated clothing before reuse.
Inhalation	Move to fresh air. Inhalation of high concentrations of vapor or aerosols may cause irritation of the upper respiratory tract.
Ingestion	If swallowed, do not induce vomiting - seek medical advice.

Most important symptoms/effects, acute and delayed

Skin contact	Not classified. Prolonged skin contact may defat the skin and produce dermatitis.
Eye contact	Not classified. Contact with eyes may cause irritation.
Inhalation	Not classified. Inhalation of vapors in high concentration may cause irritation of respiratory system.
Ingestion	Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Version GNAM



SDS # : 083981

REFRIGERATION OIL 300

Date of the previous version: 2015-05-21

Revision Date: 2015-10-13

Version 2.01

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Foam. Water spray or fog. Carbon dioxide (CO₂). ABC powder.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

Special Hazard Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration.

Explosion Data

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate non-essential personnel.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

General Information Do not touch or walk through spilled material. Contaminated surfaces will be extremely slippery.

Other information See Section 12 for additional information.

Environmental precautions

General Information Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained. Try to prevent the material from entering drains or water courses. See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Methods for cleaning up Dam up. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling When using, do not eat, drink or smoke. For personal protection see section 8. Use only in well-ventilated areas. Do not breathe vapors or spray mist. Avoid contact with skin, eyes and clothing.

Version GNAM



SDS # : 083981

REFRIGERATION OIL 300

Date of the previous version: 2015-05-21

Revision Date: 2015-10-13

Version 2.01

Hygiene measures

Regular cleaning of equipment, work area and clothing is recommended. Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. When using, do not eat, drink or smoke. Use personal protective equipment as required. Wash hands before breaks and at the end of workday. Avoid breathing vapors, mist or gas. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

Keep away from food, drink and animal feedingstuffs. Keep in a bunded area. Keep preferably in the original container. Otherwise reproduce all indication of the regulation label on the new container. Do not remove the hazard labels of the containers (even if they are empty). Design the installations in order to avoid accidental emissions of product (due to seal breakage, for example) onto hot casings or electrical contacts. Protect from frost, heat and sunlight. Protect from moisture. Keep in properly labeled containers. Keep container tightly closed in a dry and well-ventilated place.

Materials to Avoid

Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

Mineral oil mist:
USA: OSHA (PEL) TWA 5 mg/m³, NIOSH (REL) TWA 5 mg/m³, STEL 10 mg/m³, ACGIH (TLV) TWA 5 mg/m³ (highly refined).

Exposure controls

Engineering Measures

Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

Individual protection measures, such as personal protective equipment

General Information

If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied.

Eye/Face Protection

If splashes are likely to occur, wear: Safety glasses with side-shields.

Skin and body protection

Wear suitable protective clothing. Protective shoes or boots.

Version GNAM



SDS # : 083981

REFRIGERATION OIL 300

Date of the previous version: 2015-05-21

Revision Date: 2015-10-13

Version 2.01

Hand Protection

Protective gloves. Impervious gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures

Regular cleaning of equipment, work area and clothing is recommended. Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. When using, do not eat, drink or smoke. Use personal protective equipment as required. Wash hands before breaks and at the end of workday. Avoid breathing vapors, mist or gas. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Appearance	limpid
Color	amber
Physical State @20°C	liquid
Odor	Petroleum distillates
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
pH		Not applicable	
Melting point/range		No information available	
Boiling point/boiling range		Not applicable	
Flash point	191 °C 376 °F		ASTM D 92 ASTM D 92.
Evaporation rate		No information available	
Flammability Limits in Air		No information available	
upper	-	No information available	
Lower	-	No information available	
Vapor Pressure	< 0.5	@ 38 °C	
Vapor density	> 5	(Air = 1)	
Relative density	0.916	@ 15 °C	ASTM D 1298
Density	916 kg/m ³	@ 15 °C	ASTM D 1298
Water solubility		Not applicable	
Solubility in other solvents		No information available	
logPow		No information available	

Version GNAM



SDS # : 083981

REFRIGERATION OIL 300

Date of the previous version: 2015-05-21

Revision Date: 2015-10-13

Version 2.01

Autoignition temperature	> 204.5 °C > 400 °F		
Decomposition temperature		No information available	
Viscosity, kinematic	60.1 mm ² /s 6.46 mm ² /s	@ 40 °C @ 100 °C	ASTM D 445 ASTM D 445
Explosive properties	Not explosive		
Oxidizing Properties	Not applicable		
Possibility of hazardous reactions	Not applicable		
<u>Other information</u>			
Freezing Point		No information available	
Pour point	- 30 °C		ASTM D 97

10. STABILITY AND REACTIVITY

<u>Reactivity</u>	No dangerous reaction known under conditions of normal use.
<u>Chemical stability</u>	Stable under recommended storage conditions.
<u>Possibility of hazardous reactions</u>	None under normal processing.
<u>Conditions to Avoid</u>	Heat (temperatures above flash point), sparks, ignition points, flames, static electricity.
<u>Incompatible Materials</u>	Strong oxidizing agents.
<u>Hazardous Decomposition Products</u>	Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product Information Product does not present an acute toxicity hazard based on known or supplied information.

Information on likely routes of exposure

Principle Routes of Exposure Inhalation, Ingestion, Eye contact, Skin contact.

Numerical measures of toxicity

Information on toxicological effects

Skin contact Not classified. Prolonged skin contact may defat the skin and produce dermatitis.

Eye contact Not classified. Contact with eyes may cause irritation.

Version GNAM



SDS # : 083981

REFRIGERATION OIL 300

Date of the previous version: 2015-05-21

Revision Date: 2015-10-13

Version 2.01

Inhalation	Not classified. Inhalation of vapors in high concentration may cause irritation of respiratory system.
Ingestion	Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	Not classified as a sensitizer.
Carcinogenicity	This product is not classified carcinogenic.

Mutagenicity	This product is not classified as mutagenic.
Reproductive toxicity	This product does not present any known or suspected reproductive hazards.
Aspiration Hazard	Not classified.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Acute aquatic toxicity - Product Information

No experimental data available

Acute aquatic toxicity - Component Information

No information available

Chronic aquatic toxicity - Product Information

No experimental data available

Chronic aquatic toxicity - Component Information

No information available

Effects on terrestrial organisms No experimental data available .

Persistence and degradability

General Information No information available.

Bioaccumulative potential

Product Information No information available.

Version GNAM



SDS # : 083981

REFRIGERATION OIL 300

Date of the previous version: 2015-05-21

Revision Date: 2015-10-13

Version 2.01

logPow No information available

Component Information No information available.

Mobility

Soil No information available

Other adverse effects

General Information No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods Dispose of in accordance with local regulations.

Contaminated packaging Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

DOT Not regulatedTDG Not regulatedMEX Not regulatedICAO/IATA Not regulatedIMDG/IMO Not regulatedADR/RID Not regulatedADN Not regulated

15. REGULATORY INFORMATION

International Inventories All the substances contained in this product are listed or exempted from listing in the following inventories:
U.S.A. (TSCA)

U.S. Federal Regulations

Version GNAM



SDS # : 083981

REFRIGERATION OIL 300

Date of the previous version: 2015-05-21

Revision Date: 2015-10-13

Version 2.01

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	no
Chronic Health Hazard	no
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product contains chemicals known to the State of California to cause cancer or reproductive toxicity

U.S. State Right-to-Know Regulations

No information available

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazard 1	Flammability 1	Instability 0	Physical and chemical hazards -
<u>HMIS</u>	Health Hazard 1	Flammability 1	Physical Hazard 0	Personal protection X

NFPA (National Fire Protection Association)

HMIS (Hazardous Material Information System)

Hazards are split into categories each with a 0 to 4 rating, 0 meaning no hazard and 4 meaning high hazard

Version GNAM



SDS # : 083981

REFRIGERATION OIL 300

Date of the previous version: 2015-05-21

Revision Date: 2015-10-13

Version 2.01

Revision Date: 2015-10-13
Revision Note *** Indicates updated section
Abbreviations, acronyms

Legend

Section 8
 ACGIH - American Conference of Governmental Industrial Hygienists
 OSHA - Occupational Safety and Health Administration
 NIOSH - National Institute for Occupational Safety and Health
 TLV - Threshold Limit Values
 PEL - Permissible Exposure Limits
 IDHL - Immediately Dangerous to Life or Health concentrations
 TWA - Time Weight Average
 STEL - Short Term Exposure Limits
 S* - Skin notation
 TSCA - Toxic Substance Control Act

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above. It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity. The user bears sole liability for the precautions required when using the product. The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive. It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.

End of the safety data sheet

Version GNAM