



Extreme -50

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer Name: Thermofluid Technologies, Inc.
3031 Topside Business Park Drive
Louisville, TN 37777 USA

Revised: 06/03/2013

Prepared by Missy Simpson
CHEMTREC 1-800-424-9300 or 1-703-527-3887
MSDS Contact 1-865-983-1633
Information info@redtek.com

USES: Lubricating Grease

Formula: Extreme -50

HMIS
Health: 1 Flammability: 1 Reactivity: 0 Personal Protection: B

NFPA
Health: 1 Flammability: 1 Reactivity: 0

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This product may cause irritation of the eyes, skin, mucous membranes and respiratory tract. May be harmful if swallowed.

SIGNAL WORD

CAUTION

PRINCIPLE ROUTES OF EXPOSURE

Eyes, skin, and inhalation.

EYE CONTACT

Contact with eyes may cause irritation

SKIN CONTACT

May cause skin irritation and/or dermatitis.

INHALATION

Vapors and/or aerosols which may be formed at elevated temperatures may be irritating to eyes and respiratory tract.

**Extreme -50****INGESTION**

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

PHYSICO-CHEMICAL PROPERTIES:

No hazards resulting from material as supplied.

3. COMPOSITION/INFORMATION ON INGREDIENTS**HAZARDOUS COMPONENTS**

COMPONENTS	CAS No.	WEIGHT %	OSHA CEILING LIMITS	OSHA TWA (final)	ACGIH CEILING LIMITS	ACGIH EXPOSURE LIMITS	VENDOR EXPOSURE LIMITS
Mineral Oil*	8012-95-1	80-90%		5 mg/m ³		5 mg/m ³	None
Tris(dipentyldithiocarbamate-S,S')antimony	15890-25-2	1-5%		0.5 mg/m ³		0.5 mg/m ³ (TWA)	

*May include one or more of the following CAS #: 64741-88-4, 64741-89-5, 64741-44-2, 64741-96-4, 64741-97-5, 64742-46-7, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-62-7, 64742-65-0, 72623-84-8, 72623-85-9, 72623-86-0, 72623-87-1, 69029-75-0, 64742-01-4, and 64741-95-3

4. FIRST AID MEASURES**GENERAL ADVICE**

Show this safety data sheet to the doctor in attendance. Remove contaminated clothing and shoes. Wash contaminated clothing before re-use. Wash off with soap and water. If symptoms persist, call a physician.

EYE CONTACT

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes

SKIN CONTACT

Remove contaminated clothing and shoes. Wash contaminated clothing before re-use. Wash off immediately with plenty of water for at least 15 minutes.

INHALATION

Move to fresh air in case of accidental inhalation of vapors. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician if necessary.

INGESTION

If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

NOTES TO PHYSICIAN

Treat symptomatically.

MEDICAL CONDITION AGGRAVATED BY EXPOSURE

Dermatitis.

**Extreme -50****5. FIRE-FIGHTING MEASURES****Flash Point (°C):** 204**Flash Point (°F):** 400**Flash Point Method:** COC**FLAMMABLE LIMITS IN AIR – LOWER (%)**

Not determined.

FLAMMABLE LIMITS IN AIR – UPPER (%)

Not determined.

SUITABLE EXTINGUISHING MEDIAUse dry chemical, CO₂, water spray or 'alcohol' foam.**SPECIFIC HAZARDS**

Do not allow material to contaminate ground water system.

UNUSUAL HAZARDS

None known.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SPECIFIC METHODS

Water mist may be used to cool closed containers.

6. ACCIDENTAL RELEASE MEASURES**PERSONAL PRECAUTIONS**

Ensure adequate ventilation. Do not breathe vapor/dust. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling.

ENVIRONMENTAL PRECAUTIONS

Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so.

METHODS FOR CLEANING UP

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE**HANDLING****TECHNICAL MEASURES/PRECAUTIONS**

Provide sufficient air exchange and/or exhaust in work rooms.

SAFE HANDLING ADVICE

In case of insufficient ventilation, wear suitable respiratory equipment. Do not breathe vapors or spray mist. Wear personal protective equipment. Avoid contact with skin and eyes. Wash thoroughly after handling.

**Extreme -50****STORAGE****TECHNICAL MEASURES/STORAGE CONDITIONS**

Store at room temperature in the original container.

INCOMPATIBLE PRODUCTS

Strong oxidizing agents.

SAFE STORAGE TEMPERATURE

40 – 100 ° F

SHELF LIFE

2 years

8. EXPOSURE CONTROL/PERSONAL PROTECTION

COMPONENTS	OSHA CEILING LIMITS	OSHA TWA (final)	ACGIH CEILING LIMITS	ACGIH EXPOSURE LIMITS	NIOSH – POCKET GUIDE	VENDOR EXPOSURE LIMITS
Mineral Oil*	None	5 mg/m ³	None	5 mg/m ³	5 mg/m ³	None
Tris(dipentylidithiocarbamate-S,S')antimony	None	0.5 mg/m ³	None	0.5 mg/m ³ (TWA)	0.5 mg/m ³ (TWA)	None

ENGINEERING MEASURES

Ensure adequate ventilation.

PERSONAL PROTECTIVE EQUIPMENT**GENERAL**

Eye Wash and Safety Shower.

RESPIRATORY PROTECTION

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, a NIOSH-certified respirator with organic vapor/P100 filter should be worn.

EYE PROTECTION

Safety glasses with side-shields.

HAND PROTECTION

Recommended: neoprene, latex, nitrile, butyl rubber and polyethylene type.

SKIN AND BODY PROTECTION

Long sleeved clothing.

HYGIENE MEASURES

Avoid contact with skin, eyes and clothing.

**Extreme -50****9. PHYSICAL AND CHEMICAL PROPERTIES**

PHYSICAL STATE	: Semi-solid
COLOR	: Opaque Red
ODOR	: Bland
VAPOR DENSITY	: Not determined
VAPOR PRESSURE (kPa)	: Not determined
VISCOSITY	: 55 mm ² /s @ 40 C
SOLUBILITY IN WATER	: Insoluble
EVAPORATION RATE	: Not determined
pH	: Not applicable
FLASH POINT (°C)	: 204
FLASH POINT (°F)	: 400
DECOMPOSITION TEMPERATURE (°C)	: Not determined
AUTO-IGNITION TEMPERATURE (°C)	: Not determined
DENSITY @ 15.5 ° C (g/cc)	: 0.91
BULK DENSITY @ 60 ° F (lb/gal)	: 7.59
PARTITION COEFFICIENT (n-octanol/water)	: Not determined
EXPLOSIVE LIMITS	
UPPER LIMIT	: No data available
LOWER LIMIT	: No data available

10. STABILITY AND REACTIVITY**STABILITY**

Stable under recommended storage conditions.

CONDITIONS TO AVOID

None known.

MATERIALS TO AVOID

Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Carbon oxides, Sulphur oxides, Nitrogen oxides (nox), Smoke.

HAZARDOUS POLYMERIZATION

Not applicable.

11. TOXICOLOGICAL INFORMATION**MINERAL OIL INFORMATION**

Any product containing a substance for which OSHA has established a permissible exposure limit (PEL) is considered hazardous. OSHA has established a PEL of 5 mg/m³ for worker exposure to air borne mists of mineral oils. Therefore, the presence of mineral oils brings this product within the provisions of the OSHA Hazard Communication Standard where the

**Extreme -50**

PEL reaches or exceeds 5 mg/m³. Health studies have shown that many petroleum hydrocarbons pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized.

No toxicological information is available on the product. Data obtained on components are summarized below.

COMPONENTS	IARC CARCINOGENS	NTP	OSHA – Select Carcinogens	ACUTE TOXICITY
Mineral Oil*	Not listed as carcinogenic or possibly carcinogenic to humans	Not listed as known or reasonably anticipated to be a human carcinogen	Not listed as a select carcinogen	Mouse Oral LD50 = 22 g/kg
Tris(dipentylidithiocarbamato-S,S')antimony	Not listed as carcinogenic or possibly carcinogenic to humans	Not listed as known or reasonably anticipated to be a human carcinogen	Not listed as a select carcinogen	No data

12. ECOLOGICAL INFORMATION**PERSISTANCE AND DEGRADABILITY**

No information available

MOBILITY

No data available

BIOACCUMULATION

Not available

ECOTOXICITY EFFECTS

No data available

AQUATIC TOXICITY

Not determined

COMPONENT INFORMATION:

COMPONENTS	ECOTOXICITY – Fish Species Data	ECOTOXICITY – Freshwater Algae Data	ECOTOXICITY – Water Flea Data
Mineral Oil*	No data	No data	No data
Tris(dipentylidithiocarbamato-S,S')antimony	No data	No data	No data

13. DISPOSAL CONSIDERATIONS**WASTE FROM RESIDUES/UNUSED PRODUCTS**

Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority.



MATERIAL SAFETY DATA SHEET

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CONTAMINATED PACKAGING

Do not re-use empty containers.

METHODS FOR CLEANING UP

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

Tris(dipentylidithiocarbamato-S,S')antimony

15890-25-2

RCRA – Hazardous Constituents – Appendix:

Hazardous constituent – no waste number

14. TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION

PROPER SHIPPING NAME Not Regulated

TDG (CANADA)

PROPER SHIPPING NAME Not Regulated

IMDG/IMO

PROPER SHIPPING NAME Not Regulated

IATA/ICAO

PROPER SHIPPING NAME Not Regulated

15. REGULATORY INFORMATION

CANADAIAN REGULATIONS

CANADA – WHMIS CLASSIFICATION INFORMATION

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

CANADIAN PRODUCT CLASSIFICATION

None Required

COMPONENT CLASSIFICATION DATA

COMPONENTS	WHMIS HAZARD CLASS	CEPA SCHEDULE I	CHALLENGE SUBSTANCES
Mineral Oil*	1% Uncontrolled product according to WHMIS classification criteria.	Not listed	Not listed
Tris(dipentylidithiocarbamato-S,S')antimony	None	Not listed	Not listed



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U.S. FEDERAL REGULATIONS

OSHA HAZARD COMMUNICATION STANDARD

This product is considered to be hazardous under the OSHA Hazard Communication Standard.

CERCLA/SARA INFORMATION

SARA (311, 312) HAZARD CLASS : This product possesses the following SARA Hazard Categories

IMMEDIATE HEALTH (ACUTE) : Yes

DELAYED HEALTH (CHRONIC) : No

FLAMMABILITY : No

PRESSURE : No

REACTIVITY : No

COMPONENTS	HAZARDOUS SUBSTANCES AND RQs	EXTREMELY HAZARDOUS SUBSTANCES AND TPQs	SARA 313 EMISSION REPORTING
Mineral Oil*	Not listed	Not listed	Not listed
Tris(dipentylidithiocarbamato-S,S')antimony	Not listed	Not listed	1.0%

CERCLA/SARA 313 EMISSION REPORTING

2% Antimony compounds

1.0% Zinc compounds (EPA ID E649699)

CLEAN AIR AND CLEAN WATER ACTS

COMPONENTS	HAZARDOUS AIR POLLUTANTS	CWA – HAZARDOUS SUBSTANCES	CWA – TOXIC POLLUTANTS	CWA – PRIMARY POLLUTANTS
Mineral Oil*	Not listed	Not listed	Not listed	Not listed
Tris(dipentylidithiocarbamato-S,S')antimony	Listed	Not listed	Listed	Not listed

RCRA STATUS

Not regulated

U.S. STATE REGULATIONS (RTK):

COMPONENTS	CALIFORNIA PROPOSITION 65	PARTK	MI CRITICAL MATERIALS	NJRTK	MARTK
Mineral Oil*	Not listed	Present	Not Listed	1437	Present
Tris(dipentylidithiocarbamato-S,S')antimony	Not listed	Environmental hazard	Not Listed	2223	Not listed

CALIFORNIA PROPOSITION 65 STATUS

No components are listed



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INVENTORY STATUS

UNITED STATES TSCA – SECT. 8(b) INVENTORY

This product complies with TSCA

CANADA DSL/NDSL INVENTORY LIST

This product complies with DSL

16. OTHER INFORMATION

SOURCES OF KEY DATA USED TO COMPILE THE DATA SHEET

Material safety data sheets of the ingredients.

HMIS CLASSIFICATION

Health: 1 Flammability: 1 Reactivity: 0 Personal Protection: B

HMIS USE DILUTION

Health: -- Flammability: -- Reactivity: -- Personal Protection: --

NFPA RATING

Health: 1 Flammability: 1 Reactivity: 0 Special: NA

* Indicates possible chronic health effect.

Personal protection recommendations should be reviewed by purchasers. Workplace conditions are important factors in specifying adequate protection.

REFERENCES:

RESPONSIBLE NAME: PRODUCT SAFETY – Missy Simpson
FOR COPY OF (M)SDS: Internet: www.redtek.com Phone: 1-865-983-1633

DISCLAIMER

This product's safety information is provided to assist our customers in assessing compliance with safety/health/environmental regulations. The information contained herein is based on data available to us and is believed to be accurate. However, no warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of this data, the results to be obtained from the use thereof, or the hazards connected with the use of the product. Since the use of this product is within the exclusive control of the user, it is the user's obligation to determine the conditions for safe use of the product. Such conditions should comply with all regulations concerning the product. Thermofluid Technologies, Inc. assumes no liability for any injury or damage, direct or consequential, resulting from the use of this product unless such injury or damage is attributable to the gross negligence of Thermofluid Technologies, Inc.

End of Safety Data Sheet