

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g), Rev. 2012 and GHS Rev 03

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product form: Mixture
Trade name: Duratherm XLT-50
Product code: Duratherm XLT-50
Recommended application: Heat Transfer Fluid

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

Relevant identified uses of the substance or mixture:

Heat Transfer Fluid

Uses advised against:

No information available at present

1.3 Details of the supplier of the safety data sheet

Duratherm
P.O Box 563, Lewiston, NY, 14092
Telephone: 1-905-984-6677
Qualified person's e-mail address: info@durathermfluids.com

1.4 Emergency telephone number:

Tel.: 1-905-984-6677

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Combustible liquids 4 – H227, Asp. Haz 1 – H304, Skin Irrit 2 – H315, Skin Sens 1 – H317, Very toxic to aquatic life: H400:
Aqu. Chron. 1: H410

2.2 Label elements

Labeling according to Regulation (EC) No 1272/2008 [CLP/GHS]

Product Identifier:

Hazard components for labeling: Terpene – CAS# 5989-27-5
Hazard pictograms: GHS07, GHS08, GHS09



Signal word: Warning

Hazard statements

H227 Combustible liquid
H304 May be fatal if swallowed and enters airways
H315 Causes skin irritation
H317 May cause an allergic skin reaction
H410 Very toxic to aquatic life with long lasting effects

Precautionary Statements

P210 Keep away from heat, sparks, open flames, and hot surfaces. No smoking.
P273 Avoid release to the environment
P280 Wear protective gloves
P301/310/331 IF SWALLOWED. Immediately call a POISON CONTROL CENTRE. Do not induce vomiting
P302/P352 IF ON SKIN: Wash with plenty of water.

P332/P313 If eye irritation persists seek medical attention.
P501 Dispose of contents and their containers in accordance with regional, national and international regulations.

Other hazards

Other Hazards: None known

SECTION 3: Composition/information on ingredients

3.1 Substance

Not applicable

3.2 Mixture

Chemical Characterization: Mixture
Classification according to GHS: GHS07, GHS08, GHS09
Dangerous Components: Terpene CAS#: 5989-27-5

Component Name	Identification	Classification according to GHS	%
Hydrocarbon Base Fluids	CAS#: 64742-54-7	Not classified	35-55%
Terpene	CAS #: 5989-27-5	GHS07, GHS08, GHS09 Comb Liq 4 – H227 Asp. Haz 1 – H304 Skin Irrit 2 – H315 Skin Sens 1 – H317 Aqu. Chron. 1: H410	35-55%
Proprietary Additives	Trade Secret	Not classified	5-10%

SECTION 4: First aid measures

4.1 Description of first aid measures

Following Inhalation: Supply person with fresh air and consult doctor according to symptoms.
Following Skin contact: Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.
Following Eye contact: Remove contact lenses and wash thoroughly for several minutes using copious amounts of water. Seek medical help if necessary.
Following Ingestion: Rinse the mouth thoroughly with water. Do not induce vomiting. Consult doctor immediately.
Self- Protection of the First Aider: When giving first aid follow standard first aid protocol.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation

May be harmful by inhalation if exposure to vapor, mists or fumes resulting from thermal decomposition of the product

Symptoms/injuries after skin contact

Unlikely to cause harm to skin on brief or occasional contact, but prolonged or repeated exposure may lead to dermatitis.

Symptoms/injuries after eye contact

Unlikely to cause more than transient stinging or redness if accidental eye contact occurs

Symptoms/injuries after ingestion

Unlikely to cause harm if accidentally swallowed in small doses, though larger quantities may cause nausea and diarrhea

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically

SECTION 5: Firefighting measures

5.1 Extinguishing Media

Suitable extinguishing media: Water jet spray/foam/CO2/dry extinguisher

Unsuitable extinguishing media: High volume water jet

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop: Oxides of carbon, toxic gases

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fume use protective respirator with independent air supply. According to the size of the fire, use full protection if necessary. Cool container at risk with water. Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Non-emergency personnel:

Ensure sufficient supply of air
Avoid contact with eyes or skin

Emergency responders

Wear safety glasses, goggles or face shield

6.2 Environmental precautions:

If leakage occurs, dam spillage and resolve leaks as soon as possible. Prevent fluid from entering drainage systems. If fluid accidentally enters drainage systems alert authorities.

6.3 Methods and material for containment and cleaning up

For Containment: Contain spill by berm usage and blocking flow with absorbent material.

For clean up: Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth) and dispose of according to Section 13.

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 disposal information

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective Measures:

Precautions for safe handling:	Avoid contact with eyes or skin. Do not breathe vapors or mists
Information about protection against explosions or fires:	Take measure to prevent the buildup of electrostatic discharge
Aerosol and dust generation preventions:	Not applicable
Environmental precautions:	Prevent from entering drainage systems

Advice on general occupational hygiene

General hygiene measures for the handling of chemicals are applicable
Wash hands before breaks and at end of work
Keep away from food, drink and animal feed
Remove contaminated clothing and protective equipment before entering areas in which food is consumed

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

Packaging Materials:	Store product closed and only in original packaging
Requirements for storage rooms and vessels:	Store in a well-ventilated, cool and dry place

Hints on storage assembly

Storage Class:	No data available
Materials to avoid:	Do not store in plastic containers for extended periods.

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits: D-Limonene 20 ppm ACGIH; 50 ppm OSHA

8.2 Exposure controls:

8.2.1 Appropriate engineering controls: Contain with oil absorbing material (oil dry). Remove oil absorbing material and dispose lawfully

8.2.2 Personal protective equipment:

Eye protection:

Suitable eye protection

Eye protection necessary where liquid could be splashed or sprayed

Skin Protection:

Hand protection:

In case of repeated or prolonged contact wear gloves and use moisturizing skin cream

Body Protection:

PVC, neoprene, or nitrile gloves

Respiratory protection:

Normally not required in areas with adequate ventilation. In areas with poor ventilation or in the case of likely misting use appropriate respiratory equipment

Thermal Hazards:

No thermal hazards

8.2.3 Environmental exposure controls:

See section 6

Consumer exposure controls:

PVC gloves. Neoprene or nitrile rubber gloves

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Color:	Light yellow, clear
Odor:	Characteristic
Odor threshold:	Not determined
pH-value:	Not determined
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	Not determined
Flash Point ASTM D92 (COC):	>150°F (>84°C)
Evaporation Rate:	NA
Flammability (solid, gas)	NA
Lower explosive limit:	Not determined
Upper explosive limit:	Not determined
Density @ 20°C:	0.85-0.87 g/ml
Bulk density:	NA
Solubility(ies):	Not determined
Water solubility:	Insoluble
Partition coefficient (n-octanol/water)	Not determined
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Viscosity:	1.5 cSt @ 40°C
Explosive properties	NA
Oxidizing properties:	Not determined

9.2 Other information

Miscibility:	Not determined
Fat solubility / solvent:	Not determined
Conductivity:	Not determined



Surface tension: Not determined
 Solvents content: Not applicable
 Physical Hazards: Not applicable

SECTION 10: Stability and reactivity

10.1 Reactivity: Stable under normal conditions
10.2 Chemical Stability: Stable under normal conditions
10.3 Possibility of hazardous reactions: See section 2
10.4 Conditions to avoid: See section 7. Avoid contact with strong oxidizing agents
10.5 Incompatible materials: Strong oxidizing agents, acids
10.6 Hazardous decomposition products: See section 5.2 no decomposition when used as directed

SECTION 11: Toxicological information

11.1 Information on toxicological effects

11.1.1 **Substances:** Not applicable

11.1.2 Mixtures:

Acute oral toxicity: D-Limonene: LD50 rat: 4,400 mg/kg
 Acute inhalation toxicity: D-Limonene: LD50 rat: No available data
 Acute dermal toxicity: D-Limonene: LD50 rabbit: > 5,000 mg/kg
 Irritation: Not classified – Unlikely to cause harm to skin with brief contact, long term contact may cause dermatitis
 Corrosivity: Not classified
 Eye damage/irritation: Liquid in the eyes can be irritating, causing tearing and redness.
 Sensitization: May cause slight redness. Prolonged or repeated contact may cause drying of the skin.
 Repeated dose toxicity: Not classified
 Mutagenicity: Not classified
 Carcinogenicity: Not classified
 Reproductive toxicity: Not classified

Other information: No further information available

SECTION 12: Ecological information

DURATHERM XLT-50					
12.1 Toxicity/effect	Endpoint	Value	Unit	Organism	Notes
Toxicity to fish:	LC50	>0.1 -1	mg/L	Trout	
Toxicity to daphnia:					n.d.a.
Toxicity to algae:					n.d.a.
12.2 Persistence and degradability:					n.d.a.
12.3 Bio-accumulative potential:					n.d.a.
12.4 Mobility in soil:					n.d.a.
12.5 Results of PBT and vPvB assessment:					n.d.a.
12.6 Other adverse effects:					n.d.a.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product/Packaging disposal:

Soaked polluted cloths, paper or other organic materials represent a fire hazard and should be controlled, collected and disposed of.

Waste Codes/ waste designations according to EWC / AVV:

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

Waste treatment options: See section 6.2

Other disposal recommendations:

For contaminated packing material
Pay attention to local and national official regulations
Empty container completely
Uncontaminated packaging can be recycled
Dispose of packaging that cannot be cleaned in the same manner as the substance
Do not perforate, cut up or weld un-cleaned container

SECTION 14: Transport information

14.1 UN number

US DOT/ADR/RID/AND(R)/IATA/ICAO: UN3082

14.2 UN proper shipping name:

DOT, ADR, ADN, IMDG, IATA: Environmentally hazardous substance, liquid

14.3 Transport hazard class(es)

DOT, ADR, ADN, IMDG, IATA: 9



Hazard label(s):

14.4 Packing Group

DOT, ADR, IMDG, IATA: III

14.5 Environmental hazards

Marine Pollutant: Yes

14.6 Special precautions for user:

EMS Number: F-A, S-F

14.7 Transport in bulk according to Annex II of MARPOL and IB Code UN Model Regulation

SECTION 15: Regulatory information

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

15.1.1 EU regulations

SARA Hazards

No SARA Hazards

TSCA (Toxic Substances Control Act):

Terpene – CAS# 5989-27-5

All chemical substances in this mixture are included on or are exempted from listing on the TSCA Inventory for Chemical Substances

Proposition 65

Based on available information this product does not contain any components or chemicals currently known to the State of

California to cause cancer, birth defects or reproductive harm at levels which would be subject to Proposition 65

15.2 Chemical Safety Assessment:

Country	Inventory Name/Abbreviation	Status
Australia	Australian Inventory of Chemical Substances (AICS)	All components are in compliance with chemical notification requirements in Australia
Canada	Domestic Substances List (DSL/NDL)	All components are in compliance with the Canadian EPA and are on the DSL
China	Inventory of Existing Chemicals and Substances (IECS)	All components in this mixture are listed on the IECS
EU	REACH	Reach compliance information available on request. Contact info@durathermfluids.com
Japan	Existing and New Chemical Substances Inventory (ENCS)	All components in this mixture are in compliance with the chemical notification requirements of Japan
Korea	Existing Chemical List (ECL)	All components in this mixture are in compliance with the chemical notification requirements of the Republic of Korea
New Zealand	New Zealand Inventory of Chemicals (NZIoC)	All components in this mixture are in compliance with the chemical notification requirements of the country of New Zealand
Philippines	Philippines Inventory of Chemical and Chemical Substances (PICCS)	All components in this mixture are in compliance with the chemical notification requirements of the country of the Philippines
Taiwan	Toxic Chemical Substances Control Act (TCSCA)	All components in this mixture are in compliance with the chemical notification requirements of the country of Taiwan
USA	Toxic Substances Control Act (TCSA)	See section 15.1

SECTION 16: Other information

16.1 Indication of changes

SDS revision date 2017 06 20

16.2 Abbreviations and acronyms

Any abbreviations and acronyms used in this document:

AC	Article Categories
acc., acc. to	according, according to
ADR	Accord européen relatif au transport international des marchandises Dangereuses par Route
Art., Art. No	Article number
ATE	Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)
BOD	Biochemical oxygen demand
CAS	Chemical Abstracts Service
CEC	Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants
CLP	Classification, Labeling and Packaging (REGULATION (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures)
CTFA	Cosmetic, Toiletry, and Fragrance Association
e.g.	for example (abbreviation of Latin 'exempli gratia'), for instance
EC	European Community
ECHA	European Chemicals Agency
EEA	European Economic Area
EEC	European Economic Community
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EN	European Norms
EPA	United States Environmental Protection Agency (United States of America)
ERC	Environmental Release Categories
ES	Exposure scenario
Fax	Fax number
Gen.	General

GHS	Globally Harmonized System of Classification and Labelling of Chemicals
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IBC	Intermediate Bulk Container
IBC (Code)	International Bulk Chemical (Code)
IC	Inhibitory concentration
LC	lethal concentration
LC50	lethal concentration 50 percent kill
LD50	Lethal Dose, 50% kill
n.a.	Not applicable
n.av.	Not available
n.c.	Not checked
n.d.a.	No data available
NFPA	National Fire Protection Association
PPM	parts per million
UN RTDG	United Nations Recommendations on the Transport of Dangerous Goods
VOC	Volatile organic compounds
W.H.O	World Health Organization
wwt	wet weight

16.3 Further Information

Classification system

NFPA Rating: Health: 1, Fire: 2, Reactivity: 0

HMIS Rating: Health: 1, Fire: 2, Reactivity: 0

These statements were made by:

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