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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

Product identifier

Product form: Trade name: Product code: Recommended application: Mixture Duratherm G-LV Duratherm G-LV Low Viscosity PAG Based Heat Transfer Fluid

Details of the supplier of the safety data sheet

Duratherm 5268 Highway Avenue, Jacksonville, FL 32254 Telephone: 1-905-984-6677 Qualified person's e-mail address: info@durathermfluids.com

Emergency telephone number:

Tel.: 1-905-984-6677

SECTION 2: Hazards identification

Classification of the substance or mixture

This substance is not classified according to the Globally Harmonized System (GHS)

Label elements

GHS label elements:Non-regulated material, no labeling elementsHazard pictograms:Non-regulated materialSignal word:No single word, non-regulated materialClassification systemNFPA Rating: Health: 0, Fire:1, Reactivity:0HMIS Rating: Health: 0, Fire:1, Reactivity:0Other hazardsOther Hazards:None known

SECTION 3: Composition/information on ingredients

Chemical Characterization: Classification according to GHS: Dangerous Components: Mixture Not classified None, non-regulated material

Component Name	Identification	Classification according to GHS	%
Polyalkylene Glycol	CAS #: 9003-13-8	Not classified	40-60%
Ester	CAS #: 53894-23-5	Not classified	10-20%
Hydrocarbon	CAS #: 8042-47-5	Not classified	5-15%
Proprietary Additives	Trade Secret	Not classified	1-5%

SECTION 4: First aid measures

Description of first aid measures

Supply person with fresh air and consult doctor according to symptoms.

Inhalation:

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	Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.
5	Remove contact lenses. Wash thoroughly for several minutes using copious water. Seek medical help if necessary.
5	Rinse the mouth thoroughly with water. Do not induce vomiting. Consult doctor immediately.

Indication of any immediate medical attention and special treatment needed Treat symptomatically

SECTION 5: Firefighting measures

Suitable extinguishing media: Unsuitable extinguishing media: Water jet spray/foam/CO2/dry extinguisher High volume water jet

Special hazards arising from the substance or mixture

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

Advice for firefighters

In case of fire and/or explosion do not breathe fume use protective respirator with independent air supply. According to size of 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

Personal precautions, protective equipment and emergency proceduresPersonal precautions protective equipment:Not requiredEnvironmental precautions:If leakage occurs, dam

Not required If leakage occurs, dam spillage and resolve leaks as soon as possible. Prevent fluid from entering drainage systems. If fluid accidently enters drainage system alert authorities

Methods and material for containment and cleaning up

Soak up with absorbent material (e.g. universal binding agent, oil-dry, sand, diatomaceous earth) and dispose in accordance with local regulations

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

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

Precautions for safe handling: Information about protection against explosions or fires: Requirements to be met by storerooms: General guidelines: No special measures required No special measures required Store in a cool dry place Ensure good ventilation; avoid contact with eyes or skin

Notes on general hygiene measures at the workplace

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

SECTION 8: Exposure controls/personal protection

Control parameters No further data; see Section 7 Page 3 of 6 Safety data sheet according to GHS Rev 03 Revised on / Version: 12/20/2016 Replaces revision of / Version: 05/25/2015 Valid from: 12/20/2016 DURATHERM G-LV



Exposure controls:

Appropriate engineering controls:

Personal protective equipment:

Hand protection:

Eye protection: Materials for protective clothing: Hand protection:

Respiratory protection:

Environmental exposure controls: Consumer exposure controls: Other: Contain with oil absorbing material (oil dry). Remove oil absorbing material and dispose lawfully

PVC, neoprene, or nitrite gloves. Gloves should be replaced immediately if damaged or worn
Eye protection necessary where liquid could be splashed or sprayed PVC, neoprene, or nitrite gloves
In case of repeated or prolonged contact wear gloves and use moisturizing skin cream
Normally not required in areas with adequate ventilation. In areas with poor ventilation or in the case of likely misting use appropriate respiratory equipment
See section 12
PVC gloves. Neoprene or nitrile rubber gloves
Wash hands thoroughly after exposure. Do not eat drink or smoke during use. Wash contaminated clothing before use

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state: Color: Odor: Odor threshold: pH-value: Melting point/freezing point: Initial boiling point and boiling range: Flash Point ASTM D92 (COC): **Evaporation Rate:** Flammability (solid, gas) Lower explosive limit: Upper explosive limit: Density @ 20^oC: Bulk density: Solubility(ies): Water solubility: Partition coefficient (n-octanol/water) Auto-ignition temperature: Decomposition temperature: Viscosity: Explosive properties Oxidizing properties:

Other information

Miscibility: Fat solubility / solvent: Conductivity: Surface tension: Solvents content: Liquid Light yellow, clear Characteristic Not determined Not determined Not determined >550[°]F (>287[°]C) >350[°]F (>177[°]C) NA NA Not determined Not determined 0.88-0.90 g/ml NA Not determined Insoluble Not determined Not determined Not determined $20 \text{ cSt} @ 40^{\circ}\text{C}$ NA Not determined

Not determined Not determined Not determined Not determined Not applicable

SECTION 10: Stability and reactivity

Reactivity: Chemical Stability: Stable under normal conditions Stable under normal conditions

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Possibility of hazardous reactions: Conditions to avoid: Incompatible materials: Hazardous decomposition products: No dangerous reactions known See section 7 Strong oxidizing agents, acids No dangerous decomposition products known

SECTION 11: Toxicological information

Possibly more information on health effects, see Section 2 (classification).

Acute toxicity:

Not Classified

DURATHERM G-LV					
Toxicity/effect	Endpoint	Value	Unit	Organism	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	
Acute toxicity, by inhalation:	LD50	>2500	mg/kg/ 4hr	Rat	

Skin corrosion/irritation:

Serious eye damage/irritation: Respiratory or skin sensitization: Repeated does toxicity: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: Other information: Not classified – Unlikely to cause harm to harm to skin with brief contact, long term contact may cause dermatitis Not classified

Not classified Not classified Not classified Not classified Not classified Not classified Not classified No further information available

SECTION 12: Ecological information

DURATHERM G-LV					
Toxicity/effect	Endpoint	Value	Unit	Organism	Notes
Toxicity to fish:	LD50	>100,000	mg/kg /96hr	Trout	
Toxicity to daphnia:					n.d.a.
Toxicity to algae:					n.d.a.
Persistence and degradability:					n.d.a.
Bio-accumulative potential:					n.d.a.
Mobility in soil:					n.d.a.
Results of PBT and					n.d.a.
vPvB assessment:					
Other adverse effects:					n.d.a.

SECTION 13: Disposal considerations

Waste treatment methods

For the substance / mixture / residual amounts

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

For contaminated packing material

Pay attention to local and national official regulations

Empty container completely.

Uncontaminated packaging can be recycled.

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Dispose of packaging that cannot be cleaned in the same manner as the substance. Do not perforate, cut up or weld un-cleaned container.

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SECTION	14: Transport information
Transport statements	
UN number	
DOT, ADN, IMDG, IATA:	Non-regulated material
ADR:	Non-regulated material
UN proper shipping name:	
DOT, ADR, ADN, IMDG, IATA:	Non-regulated material
Transport hazard class(es)	
DOT, ADR, ADN, IMDG, IATA:	Non-regulated material
Packaging Group	C C
DOT, ADR, IMDG, IATA: Non-regulated material	
Environmental hazards	5
Marine pollutant:	No
Special precautions for users:	None
Transport in bulk according to Annex II:	
of MARPOL 73/78and IB Code UN	
"Model Regulation"	Not applicable
SECTION	15: Regulatory information
Safety, health and environmental regulations/legi	slation specific for the substance or mixture
SARA Hazards	No SARA Hazards
TSCA (Toxic Substances Control Act):	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
l aboling requirements	

Labeling requirements GHS label elements Hazard pictograms Signal word

Non-regulated material Non-regulated material Non-regulated material

SECTION 16: Other information

These details refer to the product as it is delivered.

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

	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)

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CTFA	Cosmetic, Toiletry, and Fragrance Association
e.g.	for example (abbreviation of Latin 'exempli gratia'), for instance
EČ	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
WHO	World Health Organization
wwt	wet weight

These statements were made by:

Duratherm

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