Page 1 of 8

Safety data sheet according to Regulation (EC) No 453/2010

Revised on / Version: 12/20/2016
Replaces revision of / Version: 10/04/2016

Valid from: 12/20/2016 DURATHERM 600



# Safety data sheet according to Regulation (EC) No 453/2010

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

#### 1.1 Product identifier

Product form: Mixture

Product name:

Product code:

Product group:

Duratherm 600

Duratherm 600

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

5268 Highway Avenue, Jacksonville, FL 32254

Telephone: +1-905-984-6677

Qualified person's e-mail address: info@durathermfluids.com

## 1.4 Emergency telephone

## Telephone number of the company in case of emergencies:

Telephone: +1-905-984-6677

## **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) 1272/2008 (CLP)

Not classified

#### 2.2 Label elements

#### 2.2.1 Labeling according to Regulation (EC) 1272/2008 (CLP)

No labeling applicable

#### 2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006.

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006.

#### **SECTION 3: Composition/information on ingredients**

#### 3.1 Substance

Not applicable

## 3.2 Mixture

Chemical Characterization: Mixture
Classification according to GHS: Not classified

Dangerous Components: None, non-regulated material

Page 2 of 8

Safety data sheet according to Regulation (EC) No 453/2010

Revised on / Version: 12/20/2016
Replaces revision of / Version: 10/04/2016

Valid from: 12/20/2016 DURATHERM 600



Component Name	Identification	Classification according to GHS	%
Hydrocarbon Base Fluids	CAS #: 8042-47-5	Not classified	90-95%
Proprietary Additives	Trade Secret	Not classified	5-10%

#### **SECTION 4: First aid measures**

## 4.1 Description of first aid measures

#### Inhalation

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

#### 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.

#### **Eve contact**

Remove contact lenses.

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

## Ingestion

Rinse the mouth thoroughly with water. Do not induce vomiting. Consult doctor immediately.

## 4.2 Most important symptoms and effects, both acute and delayed

#### Symptoms/injuries after inhalation

At normal ambient temperatures this product will be unlikely to present an inhalation hazard because of its low volatility. May be harmful by inhalation if exposure to vapour, 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 then transient stinking or redness if accidental eye contact occurs

## Symptoms/injuries after ingestion

Unlikely to cause harm if accidently 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 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**

## 6.1 Personal precautions, protective equipment and emergency procedures

Ensure sufficient supply of air. Avoid contact with eyes or skin If applicable, caution - risk of slipping Page 3 of 8

Safety data sheet according to Regulation (EC) No 453/2010

Revised on / Version: 12/20/2016
Replaces revision of / Version: 10/04/2016

Valid from: 12/20/2016 DURATHERM 600



## **6.2 Environmental precautions**

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

## 6.3 Methods and material for containment and cleaning 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

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

## **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.

## 7.1 Precautions for safe handling

#### 7.1.1 General recommendations

Ensure good ventilation.

Avoid contact with eyes or skin.

Do not carry cleaning cloths soaked in product in trouser pockets.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Observe directions on label and instructions for use.

## 7.1.2 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.

## 7.2 Conditions for safe storage, including any incompatibilities

Not to be stored in gangways or stair wells.

Store product closed and only in original packing.

Under all circumstances prevent penetration into the soil.

Store in a well-ventilated place.

Store in a dry place.

Store cool

## 7.3 Specific end use(s)

No information available at present.

## **SECTION 8: Exposure controls/personal protection**

## 8.1 Control parameters

No information available at present.

#### 8.2 Exposure controls

## Appropriate engineering controls:

Contain with oil absorbing material (oil dry). Remove oil absorbing material and dispose lawfully

#### Personal protective equipment:

Hand: PVC, neoprene, or nitrite gloves. Gloves should be replaced immediately if damaged or worn

Eye protection: Eye protection necessary where liquid could be splashed or sprayed





Page 4 of 8

Safety data sheet according to Regulation (EC) No 453/2010

Revised on / Version: 12/20/2016
Replaces revision of / Version: 10/04/2016

Valid from: 12/20/2016 DURATHERM 600



## Materials for protective clothing

PVC, neoprene, or nitrite gloves

#### Hand protection

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

#### 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

## **Environmental exposure controls**

See section 12

#### Consumer exposure controls

PVC gloves. Neoprene or nitrile rubber gloves

#### Other

Wash hands thoroughly after exposure. Do not eat drink or smoke during use. Wash contaminated clothing before use

## **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

Physical state: Liquid

Colour: Light yellow, clear Odour: Characteristic Odour threshold: Not determined pH-value: Not determined Melting point/freezing point: Not determined Initial boiling point and boiling range: >315°C >218<sup>O</sup>C Flash Point ASTM D92 (COC): **Evaporation Rate:** NA Flammability (solid, gas) NA

Lower explosive limit:

Upper explosive limit:

Density @ 20 C:

Not determined
Not determined
0,85-0,88 g/ml

Bulk density: NA

Solubility(ies):

Water solubility:

Partition coefficient (n-octanol/water)

Auto-ignition temperature:

Decomposition temperature:

Viscosity:

Not determined

Not determined

Not determined

Viscosity:

41 cSt @ 40°C

Explosive properties NA

Oxidizing properties: Not determined

#### 9.2 Other information

Miscibility:

Fat solubility / solvent:

Conductivity:

Surface tension:

Solvents content:

Not determined
Not determined
Not determined
Not applicable

## **SECTION 10: Stability and reactivity**

## 10.1 Reactivity

Not to be expected

#### 10.2 Possibility of hazardous reactions

Not to be expected

Page 5 of 8

Safety data sheet according to Regulation (EC) No 453/2010

Revised on / Version: 12/20/2016 Replaces revision of / Version: 10/04/2016

Valid from: 12/20/2016 DURATHERM 600



#### 10.3 Conditions to avoid

See section 7.

## 10.4 Incompatible materials

See also section 7.

Avoid contact with strong oxidizing agents.

## 10.5 Hazardous decomposition products

See also section 5.2

No decomposition when used as directed.

## **SECTION 11: Toxicological information**

Possibly more information on health effects, see Section 2.1 (classification).

Acute toxicity: Not Classified

DURATHERM 600						
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: Not classified – Unlikely to cause harm to harm to skin with brief contact, long

term contact may cause dermatitis

Serious eye damage/irritation:
Respiratory or skin sensitization:
Repeated does toxicity:
Not classified
Repeated mutagenicity:
Not classified
Carcinogenicity:
Reproductive toxicity:
Not classified
Not classified
Not classified

Other information: No further information available

## **SECTION 12: Ecological information**

DURATHERM 600					
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.

Page 6 of 8

Safety data sheet according to Regulation (EC) No 453/2010

Revised on / Version: 12/20/2016
Replaces revision of / Version: 10/04/2016

Valid from: 12/20/2016 DURATHERM 600



## **SECTION 13: Disposal considerations**

## 13.1 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.

## EC disposal code no:

The waste codes are recommendations based on the scheduled use of this product. Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2001/118/EC, 2001/119/EC, 2001/573/EC) 13 03 08 synthetic insulating and heat transmission oils

Recommendation:

Pay attention to local and national official regulations

E.g. dispose at suitable refuse site.

E.g. suitable incineration plant.

#### 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. Transport statements

**UN** number

DOT, ADN, IMDG, IATA:

ADR:

Non-regulated material

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** 

DOT, ADR, IMDG, IATA: Non-regulated material

**Environmental hazards** 

Marine pollutant: No Special precautions for users: No None

Transport in bulk according to Annex II: of MARPOL 73/78and IB Code UN

"Model Regulation" Not applicable

## **SECTION 15: Regulatory information**

## 15.1 Safety, health and environmental regulations/legislation 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

Page 7 of 8

Safety data sheet according to Regulation (EC) No 453/2010

Revised on / Version: 12/20/2016
Replaces revision of / Version: 10/04/2016

Valid from: 12/20/2016 DURATHERM 600



## 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/NDSL)	All components are in compliance with the Canadian EPA and are on the DSL
China	Inventory of Existing Chemicals and Substances (IECSC)	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
Phillippines	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**

These details refer to the product as it is delivered.

An	y ab	breviations	s and	l acrony	yms	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

and Other Fluids

CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification,

labelling and packaging of substances and mixtures)

COD Chemical oxygen demand

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

EPA United States Environmental Protection Agency (United States of America)

ERC Environmental Release Categories

ES Exposure scenario

etc. et cetera
EU European Union
Fax. Fax number
qen. qeneral

GHS Globally Harmonized System of Classification and Labelling of Chemicals

Page 8 of 8

Safety data sheet according to Regulation (EC) No 453/2010

Revised on / Version: 12/20/2016
Replaces revision of / Version: 10/04/2016

Valid from: 12/20/2016 DURATHERM 600



IARC International Agency for Research on Cancer
IATA International Air Transport Association

IBC Intermediate Bulk Container
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

OECD Organization for Economic Co-operation and Development

PBT persistent, bio accumulative and toxic

ppm parts per million
PROC Process category
PTFE Polytetrafluorethylene

REACH Registration, Evaluation, Authorization and Restriction of Chemicals (REGULATION (EC) No

1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals)

SVHC Substances of Very High Concern

Tel. Telephone

UN RTDG United Nations Recommendations on the Transport of Dangerous Goods

VOC Volatile organic compounds

vPvB very persistent and very bio accumulative

WHO World Health Organization

wwt wet weight

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. No responsibility.

These statements were made by:

Duratherm

5268 Highway Avenue, Jacksonville, FL 32254

Telephone: +1-905-984-6677

Qualified person's e-mail address: info@durathermfluids.com