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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

U-Clean



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: Mixture
Trade name: U-Clean
Product code: U-Clean

Recommended application: Heat Transfer System Cleaner

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 elements

Hazard pictograms: Non-regulated material

Signal word: No single word, non-regulated material

Classification system

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

Other hazards

Other Hazards: None known

SECTION 3: Composition/information on ingredients

Chemical Characterization: Mixture
Classification according to GHS: Not classified

Dangerous Components: None, non-regulated material

Component Name	Identification	Classification according to GHS	%
Polyalkaline 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

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.

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Eye 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.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically

SECTION 5: Firefighting measures

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

Unsuitable extinguishing media: 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 procedures

Personal precautions protective equipment: Not required

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

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:

No special measures required
No special measures required
Store in a cool dry place

General guidelines: 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

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Exposure controls:

Appropriate engineering controls: Contain with oil absorbing material (oil dry). Remove oil absorbing

material and dispose lawfully

Personal protective equipment:

Hand protection: 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

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

Information on basic physical and chemical properties

Physical state: Liquid

Color:

Odor:

Odor:

Odor threshold:

PH-value:

Melting point/freezing point:

Initial boiling point and boiling range:

Flash Point ASTM D92 (COC):

Light yellow, clear

Characteristic

Not determined

Not determined

>570°F (>298°C)

>470°F (>243°C)

Evaporation Rate: NA Flammability (solid, gas) NA

Lower explosive limit:

Upper explosive limit:

Density @ 20°C:

Not determined

Not determined

0.84-0.95 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

Not determined

Viscosity:

55 cSt @ 40°C

Explosive properties NA

Oxidizing properties: Not determined

Other information

Miscibility: Not determined Fat solubility / solvent: Not determined Conductivity: Not determined Surface tension: Not determined Solvents content: Not applicable

SECTION 10: Stability and reactivity

Reactivity: Stable under normal conditions
Chemical Stability: Stable under normal conditions
Possibility of hazardous reactions: No dangerous reactions known

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Conditions to avoid: See section 7

Incompatible materials: Strong oxidizing agents, acids

Hazardous decomposition products: No dangerous decomposition products known

SECTION 11: Toxicological information

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

Acute toxicity: Not Classified

DURACLEAN LSC					
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
Rem cell mutagenicity:
Not classified
Carcinogenicity:
Reproductive toxicity:
Not classified
Not classified
Not classified

Other information: No further information available

SECTION 12: Ecological information

DURACLEAN LSC						
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 vPvB assessment:					n.d.a.	
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.

Dispose of packaging that cannot be cleaned in the same manner as the substance.

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Do not perforate, cut up or weld un-cleaned container.

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

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

Environmental hazards

Marine pollutant: No Special precautions for users: None

Transport in bulk according to Annex II:

of MARPOL 73/78and IB Code UN

Not applicable "Model Regulation"

SECTION 15: Regulatory information

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

Labeling requirements

GHS label elements Non-regulated material Hazard pictograms Non-regulated material Non-regulated material Signal word

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** according, according to acc., acc. to

Accord européen relatif au transport international des marchandises Dangereuses par Route **ADR**

Art., Art. no.

ATE Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)

Biochemical oxygen demand BOD Chemical Abstracts Service CAS

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)

Cosmetic, Toiletry, and Fragrance Association **CTFA**

for example (abbreviation of Latin 'exempli gratia'), for instance e.g.

EC **European Community** Page 6 of 6

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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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