



SAFETY DATA SHEET THERMAL TRANSFER FLUIDS

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

1.1. Product identifier

Product name THERMAL TRANSFER FLUIDS
Product number 10061
Synonyms; trade names INHIBITED ETHYLENE GLYCOL, THERMOCAL, UCATHERM, COOL FLO ME

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

1.3. Details of the supplier of the safety data sheet

Supplier Univar
Aquarius House
6 Mid Point Business Park
Bradford
BD3 7AY
+44 1274 267300
sds@univar.com
+44 1274 267306

1.4. Emergency telephone number

Emergency Contact Number +44 1274 267346
(Office Hours)

Emergency Contact Number +441865 407333
(Outside Office Hours)

Sds No. 10061

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards Not Classified
Health hazards Acute Tox. 4 - H302 STOT RE 2 - H373
Environmental hazards Not Classified

Classification (67/548/EEC or 1999/45/EC) Xn;R22.

2.2. Label elements

Pictogram



Signal word Warning

THERMAL TRANSFER FLUIDS

Hazard statements	H302 Harmful if swallowed. H373 May cause damage to organs through prolonged or repeated exposure if swallowed.
Precautionary statements	P260 Do not breathe vapour/spray. P264 Wash contaminated skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor. P314 Get medical advice/attention if you feel unwell. P330 Rinse mouth. P501 Dispose of contents/container in accordance with national regulations.
Contains	ETHANEDIOL

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

ETHANEDIOL		60-100%
CAS number: 107-21-1	EC number: 203-473-3	REACH registration number: 01-2119456816-28
Classification Acute Tox. 4 - H302 STOT RE 2 - H373	Classification (67/548/EEC or 1999/45/EC) Xn; R48/22, R22	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
Ingestion	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention immediately.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes.

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

4.3. Indication of any immediate medical attention and special treatment needed

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

5.2. Special hazards arising from the substance or mixture

Specific hazards Oxides of the following substances: Carbon.

5.3. Advice for firefighters

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Absorb spillage with inert, damp, non-combustible material. Flush contaminated area with plenty of water. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

6.4. Reference to other sections

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. Mechanical ventilation or local exhaust ventilation may be required. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a well-ventilated place.

7.3. Specific end use(s)

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

ETHANEDIOL

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ particulate
 Long-term exposure limit (8-hour TWA): WEL 20 ppm 52 mg/m³ vapour
 Short-term exposure limit (15-minute): WEL 40 ppm 104 mg/m³ vapour
 Sk, Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

ETHANEDIOL (CAS: 107-21-1)

Ingredient comments	WEL = Workplace Exposure Limits
DNEL	Industry - Inhalation; Short term : 35 mg/m ³ Industry - Dermal; Long term : 106 mg/kg/day Consumer - Dermal; Long term : 53 mg/kg/day Consumer - Inhalation; Long term : 7 mg/m ³
PNEC	- Fresh water; 10 mg/l - Marine water; 1 mg/l - Soil; 1.53 mg/l - STP; 199.5 mg/l

8.2. Exposure controls

Protective equipment



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Eye/face protection	The following protection should be worn: Chemical splash goggles.
Hand protection	Use protective gloves.
Other skin and body protection	Wear rubber apron. Wear rubber footwear.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Various colours.
pH	pH (concentrated solution): 6 - 8
Melting point	-13°C
Initial boiling point and range	150°C @
Flash point	116°C CC (Closed cup).
Vapour pressure	<10 Pa @ °C
Relative density	1.115 @ °C
Solubility(ies)	Soluble in water.
Partition coefficient	: -1.36
Auto-ignition temperature	400°C

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

10.5. Incompatible materials

Materials to avoid	Strong oxidising agents.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Oxides of the following substances: Carbon.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg)	555.5555556
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Inhalation	Irritating to respiratory system.
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Ingestion	Gastrointestinal symptoms, including upset stomach. Nausea, vomiting.
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Skin contact	Irritating to skin.
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Eye contact Irritating to eyes.

SECTION 12: Ecological Information

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

12.2. Persistence and degradability

12.3. Bioaccumulative potential

Partition coefficient : -1.36

12.4. Mobility in soil

Mobility The product is soluble in water.

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

Cod 1.29

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information When handling waste, the safety precautions applying to handling of the product should be considered. Do not puncture or incinerate, even when empty.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

14.5. Environmental hazards

14.6. Special precautions for user

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

SECTION 15: Regulatory information

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

National regulations The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

EU legislation Dangerous Preparations Directive 1999/45/EC.

Guidance CHIP for everyone HSG228.
Safety Data Sheets for Substances and Preparations.
Approved Classification and Labelling Guide (Sixth edition) L131.

15.2. Chemical safety assessment

SECTION 16: Other information

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Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date

31/03/2015

Revision

07

Supersedes date

24/08/2010

SDS number

10061

SDS status

Approved.

Signature

Jitendra Panchal

Risk phrases in full

R22 Harmful if swallowed.

Hazard statements in full

H302 Harmful if swallowed.

H373 May cause damage to organs (Kidneys) through prolonged or repeated exposure if swallowed.

H373 May cause damage to organs through prolonged or repeated exposure if swallowed.

TURKISH SIGNATURE