

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 02/02/2016 Version: 1.0

SECTION 1: Identification

Identification

Product form Mixture

Trade name **KKT PROTECT 37**

CAS No Mixture Product code 55036

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

Use of the substance/mixture Heat Transfer Fluid

Details of the supplier of the safety data sheet

Interstate Chemical Company, Inc.

2797 Freedland Road

Hermitage, PA 16148-0210 - United States T 800-422-2436 - F (724) 509-1015

<u>herm-eh&s@interstatechemical.com</u> - <u>www.interstatechemical.com</u>

Emergency telephone number

Emergency number : For 24-Hour Emergency Information Call Chemtrec: +1 (800) 424-9300

SECTION 2: Hazard(s) identification

Classification of the substance or mixture

H302

Classification (GHS-US)

Acute toxicity (oral)

Category 4

Full text of H statements : see section 16

Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



GHS07

Signal word (GHS-US) Warning Contains ethylene glycol

Hazard statements (GHS-US) H302 - Harmful if swallowed

Precautionary statements (GHS-US) P264 - Wash hands, forearms and face thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P301+P312 - If swallowed: Call a doctor or poison center if you feel unwell

P330 - Rinse mouth

P501 - Dispose of contents/container to a hazardous or special waste collection point, an approved waste disposal plant, an authorized waste collection point, an industrial incineration

plant

Other hazards

No additional information available

Unknown acute toxicity (GHS US) 2.4.

Not applicable

SECTION 3: Composition/information on ingredients

Substance 3.1.

Not applicable

Mixture

02/03/2016 EN (English US) Page 1

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Name	Product identifier	%	Classification (GHS-US)
DEIONIZED WATER	(CAS No) 7732-18-5	55 - 60	Not classified
ethylene glycol	(CAS No) 107-21-1	35 - 40	Acute Tox. 4 (Oral), H302
CORROSION INHIBITORS AND pH BUFFERS	(CAS No) Trade Secret	1 - 5	Not classified
LIQUID DYE	(CAS No) Mixture	<= 1	Not classified

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

advice (show the label where possible).

First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed

by warm water rinse.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persist.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON

CENTER or doctor/physician if you feel unwell.

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

Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

02/03/2016 EN (English US) 2/7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands, forearms and face

thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Sources of

ignition. Keep container closed when not in use.

Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ethylene glycol (107-21-1)		
ACGIH	ACGIH Ceiling (mg/m³)	100 mg/m³
ACGIH	Remark (ACGIH)	URT & eye irr

CORROSION INHIBITORS AND pH BUFFERS (Trade Secret)

Not applicable

LIQUID DYE (Mixture)

Not applicable

DEIONIZED WATER (7732-18-5)

Not applicable

8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Respiratory protection : Wear appropriate mask.

Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Clear, Yellow Liquid.

Color : Light yellow
Odor : characteristic
Odor threshold : No data available
pH : No data available

Melting point : -13 °C

Freezing point : No data available

Boiling point : 197 $^{\circ}$ C Critical temperature : 372 $^{\circ}$ C Flash point : 111 $^{\circ}$ C

Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : No data available Explosion limits : 3 - 15 vol % Explosive properties : No data available Oxidizing properties : No data available Vapor pressure : 0.07 hPa

Vapor pressure : 0.07 hPa
Vapor pressure at 50 °C : 1.1 hPa
Relative density : 1.0561
Relative vapor density at 20 °C : 2.1
Specific gravity / density : 8.8 lb/gal

02/03/2016 EN (English US) 3/7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Molecular mass : 62.07 g/mol

Solubility : Soluble in water. Soluble in ethanol. Soluble in acetone. Soluble in acetic acid. Soluble in

glycerol. Soluble in pyridine.

Ethanol: Complete Acetone: Complete

Log Pow : -1.34 (Experimental value)

Auto-ignition temperature : 398 °C

Decomposition temperature : > 500 °C

Viscosity : No data available
Viscosity, kinematic : 18.86 mm²/s (20 °C)
Viscosity, dynamic : 0.021 Pa.s (20 °C)

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

KKT PROTECT 37 (Mixture)	
ATE US (oral)	1250.000 mg/kg body weight
ethylene glycol (107-21-1)	
LD50 oral rat	> 5000 mg/kg (Rat; Literature study)
ATE US (oral)	500.000 mg/kg body weight

 Skin corrosion/irritation
 : Not classified

 Serious eye damage/irritation
 : Not classified

 Respiratory or skin sensitization
 : Not classified

 Germ cell mutagenicity
 : Not classified

 Carcinogenicity
 : Not classified

Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated

exposure)

Not classified

Aspiration hazard : Not classified

02/03/2016 EN (English US) 4/7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Potential Adverse human health effects and

symptoms

: Based on available data, the classification criteria are not met. Harmful if swallowed.

Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

SECTION 12: Ecological information

12.1. Toxicity

ethylene glycol (107-21-1)	
LC50 fish 1	53000 mg/l (96 h; Pimephales promelas; Static system)
EC50 Daphnia 1	> 10000 mg/l (24 h; Daphnia magna)
LC50 fish 2	40761 mg/l (96 h; Salmo gairdneri (Oncorhynchus mykiss); Static system)
Threshold limit algae 1	> 10000 mg/l (168 h; Scenedesmus quadricauda)
Threshold limit algae 2	2000 mg/l (192 h; Microcystis aeruginosa)

12.2. Persistence and degradability

KKT PROTECT 37 (Mixture)	
Persistence and degradability	Not established.
ethylene glycol (107-21-1)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil.
Biochemical oxygen demand (BOD)	0.47 g O₂/g substance
Chemical oxygen demand (COD)	1.24 g O₂/g substance
ThOD	1.29 g O₂/g substance
BOD (% of ThOD)	0.36 % ThOD

12.3. Bioaccumulative potential

KKT PROTECT 37 (Mixture)	
Log Pow	-1.34 (Experimental value)
Bioaccumulative potential	Not established.
ethylene glycol (107-21-1)	
BCF fish 1	10 (72 h; Leuciscus idus)
BCF other aquatic organisms 1	0.21 - 0.6 (Procambarus sp.; Chronic)
BCF other aquatic organisms 2	190 (24 h; Algae)
Log Pow	-1.34 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

ethylene glycol (107-21-1)	
Surface tension	0.048 N/m (20 °C)

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of

contents/container to an approved hazardous waste plant and/or drum reconditioner.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT Not regulated for transport

02/03/2016 EN (English US) 5/7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

TDG

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

ethylene glycol (107-21-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

CERCLA RQ 5000 lb

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

ethylene glycol (107-21-1)

U.S. - Massachusetts - Right To Know List

SECTION 16: Other information

Abbreviations and acronyms

European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways. European Agreement concerning the International Carriage of Dangerous Goods by Road. Acute Toxicity Estimate. Bioconcentration factor. Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008. Derived Minimal Effect level. Derived-No Effect Level. Dangerous Preparations Directive 1999/45/EC. Dangerous Substances Directive 67/548/EEC. Median effective concentration. International Agency for Research on Cancer. International Air Transport Association. International Maritime Dangerous Goods. Median lethal concentration. Median lethal dose. Lowest Observed Adverse Effect Level. No-Observed Adverse Effect Concentration. No-Observed Adverse Effect Level. No-Observed Effect Concentration. Organisation for Economic Co-operation and Development. Persistent Bioaccumulative Toxic. Predicted No-Effect Concentration. Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006. Regulations concerning the International Carriage of Dangerous Goods by Rai. Safety Data Sheet. Sewage treatment plant. Median Tolerance Limit. Very Persistent and Very Bioaccumulative.

Other information : None.

Full text of H-phrases:

H302 Harmful if swallowed

NFPA health hazard : 2 - Intense or continued exposure could cause temporary

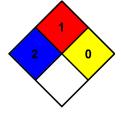
incapacitation or possible residual injury unless prompt

medical attention is given.

NFPA fire hazard : 1 - Must be preheated before ignition can occur.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions,

and are not reactive with water.



02/03/2016 EN (English US) 6/7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids,

solids and semi solids having a flash point above 200 F. (Class IIIB)

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT

react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal Protection : B,n

B - Safety glasses, Gloves

n - Splash goggles

SDS US (GHS HazCom 2012)

Interstate Chemical Company, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

02/03/2016 EN (English US) 7/7