

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : KKT PROTECT INHIBITED PG 37  
CAS No : Mixture  
Product code : 55038

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

Use of the substance/mixture : Heat Transfer Fluid

#### 1.3. Details of the supplier of the safety data sheet

KKT Chillers, Inc.  
1280 Landmeier Road  
Elk Grove, IL 60007 - United States  
T: 847-734-1600  
[sales@kkt-chillersusa.com](mailto:sales@kkt-chillersusa.com)

#### 1.4. Emergency telephone number

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

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### Classification (GHS-US)

Not classified

#### 2.2. Label elements

##### GHS-US labeling

No labeling applicable

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
DEIONIZED WATER	(CAS No) 7732-18-5	55 - 60	Not classified
PROPYLENE GLYCOL, INDUSTRIAL	(CAS No) 57-55-6	35 - 40	Not classified
CORROSION INHIBITORS AND pH BUFFERS	(CAS No) Trade Secret	1 - 5	Not classified
LIQUID DYE	(CAS No) Mixture	<= 1	Not classified

Full text of classification categories and H statements : 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.

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### 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.

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

#### CORROSION INHIBITORS AND pH BUFFERS (Trade Secret)

Not applicable

#### LIQUID DYE (Mixture)

Not applicable

#### PROPYLENE GLYCOL, INDUSTRIAL (57-55-6)

Not applicable

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### 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	: Yellow
Odor	: characteristic
Odor threshold	: No data available
pH	: No data available
Melting point	: -13 °C
Freezing point	: -6 °F
Boiling point	: 218 °F
Critical temperature	: 372 °C
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: 0.07 hPa
Vapor pressure at 50 °C	: 1.1 hPa
Relative vapor density at 20 °C	: 2.1
Relative density	: 1.0258
Specific gravity / density	: 8.55 lb/gal
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, kinematic	: 18.86 mm <sup>2</sup> /s (20 °C)
Viscosity, dynamic	: 0.021 Pa.s (20 °C)
Explosion limits	: 3 - 15 vol %
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

Specific conductivity	: 116 µS/m
Saturation concentration	: 0.31 g/m <sup>3</sup>
VOC content	: 0 %

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

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### 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 : Not classified

#### PROPYLENE GLYCOL, INDUSTRIAL (57-55-6)

LD50 oral rat	20000 mg/kg (Rat; Experimental value)
LD50 dermal rat	22500 mg/kg (Rat; Experimental value)
LD50 dermal rabbit	20800 mg/kg (Rabbit; Experimental value)
ATE US (oral)	20000.000 mg/kg body weight
ATE US (dermal)	20800.000 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

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

#### PROPYLENE GLYCOL, INDUSTRIAL (57-55-6)

LC50 fish 1	51400 mg/l (96 h; Pimephales promelas)
LC50 other aquatic organisms 1	> 1000 mg/l (96 h)
EC50 Daphnia 1	34400 mg/l (48 h; Daphnia magna)
LC50 fish 2	51600 mg/l (96 h; Oncorhynchus mykiss)
TLM fish 1	> 1000 ppm (96 h; Pisces)
TLM other aquatic organisms 1	> 1000 ppm (96 h)
Threshold limit other aquatic organisms 1	> 1000 mg/l (96 h)
Threshold limit algae 1	15000 mg/l (336 h; Selenastrum capricornutum)
Threshold limit algae 2	< 5300 mg/l (336 h; Skeletonema costatum)

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### 12.2. Persistence and degradability

#### KKT PROTECT INHIBITED PG 37 (Mixture)

Persistence and degradability	Not established.
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#### PROPYLENE GLYCOL, INDUSTRIAL (57-55-6)

Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil.
Biochemical oxygen demand (BOD)	0.96 - 1.08 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.63 g O <sub>2</sub> /g substance
ThOD	1.69 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.57 % ThOD

### 12.3. Bioaccumulative potential

#### KKT PROTECT INHIBITED PG 37 (Mixture)

Log Pow	-1.34 (Experimental value)
Bioaccumulative potential	Not established.

#### PROPYLENE GLYCOL, INDUSTRIAL (57-55-6)

Log Pow	-1.41 - -0.30
Bioaccumulative potential	Not bioaccumulative.

### 12.4. Mobility in soil

#### PROPYLENE GLYCOL, INDUSTRIAL (57-55-6)

Surface tension	0.036 N/m (25 °C)
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### 12.5. Other adverse effects

Effect on the global warming	: No known effects from this product.
GWPmix comment	: No known effects from 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 applicable

### TDG

Not applicable

### Transport by sea

Not applicable

### Air transport

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### PROPYLENE GLYCOL, INDUSTRIAL (57-55-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory
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### DEIONIZED WATER (7732-18-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### 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

### PROPYLENE GLYCOL, INDUSTRIAL (57-55-6)

U.S. - New Jersey - Right to Know Hazardous Substance List

## SECTION 16: Other information

Other information : None.

Abbreviations and acronyms:

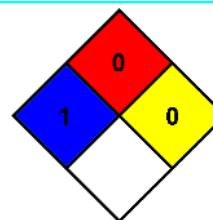
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
DPD	Dangerous Preparations Directive 1999/45/EC
DSD	Dangerous Substances Directive 67/548/EEC
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rai
SDS	Safety Data Sheet
STP	Sewage treatment plant
TLM	Median Tolerance Limit
vPvB	Very Persistent and Very Bioaccumulative

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NFPA health hazard	:	1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard	:	0 - Materials that will not burn.
NFPA reactivity	:	0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating	:	
Health	:	1 Slight Hazard - Irritation or minor reversible injury possible
Flammability	:	0 Minimal Hazard - Materials that will not burn
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)

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