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

1.1. Product identifier

Product form : Mixture
Product name : Thermal Charge PG Orange 30/70 Prediluted Heat Transfer Fluid

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

Use of the substance/mixture : Heat transfer fluid
Recommended use : Contact supplier for more information on uses.

1.3. Details of the supplier of the safety data sheet

Old World Industries, LLC
3100 Sanders Road
Northbrook, IL 60062 - USA
T (847) 559-2000
www.oldworldind.com

1.4. Emergency telephone number

Emergency number : 800 424 9300 (United States); 00 1 703 527 3887 (International)
Chemtrec

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification
Not classified

2.2. Label elements

GHS-US labelling
Signal word (GHS-US) : None
Hazard statements (GHS-US) : None
Precautionary statements (GHS-US) : None

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>% by wt</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>water</td>
<td>(CAS-No.) 7732-18-5</td>
<td>&lt;= 70</td>
<td>Not classified</td>
</tr>
<tr>
<td>propylene glycol</td>
<td>(CAS-No.) 57-55-6</td>
<td>&gt;= 30</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

Full text of hazard classes and H-statements : see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact : Not expected to present a significant hazard under anticipated conditions of normal use.
First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion: Never give anything by mouth to an unconscious person. Rinse mouth. Obtain emergency medical attention.

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

Symptoms/effects: Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after skin contact: Contact during a long period may cause light irritation.
Symptoms/effects after eye contact: May cause slight irritation.
Symptoms/effects after ingestion: Excessive ingestion may cause central nervous system effects.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media


5.2. Special hazards arising from the substance or mixture

Reactivity: Stable.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions: Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

For containment: Collect spillage. Contain released product, pump into suitable containers.
Methods for cleaning up: Notify authorities if product enters sewers or public waters. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

No additional information available

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.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container closed when not in use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Substance</th>
<th>Type</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>propylene glycol (57-55-6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>water (7732-18-5)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 8.2. Appropriate engineering controls

No additional information available

### 8.3. Individual protection measures/Personal protective equipment

**Personal protective equipment:**

Face shield. Protective goggles.

**Hand protection:**

Not required for normal conditions of use

**Eye protection:**

Chemical goggles or face shield

**Respiratory protection:**

In case of insufficient ventilation, wear suitable respiratory equipment

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>orange</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>9 - 10</td>
</tr>
<tr>
<td>Reserve Alkalinity</td>
<td>3.5 - 4.5 ml</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>Slight</td>
</tr>
<tr>
<td>Freezing point</td>
<td>-13 °C (9 °F)</td>
</tr>
<tr>
<td>Boiling point</td>
<td>102 °C (216 °F)</td>
</tr>
<tr>
<td>Flash point</td>
<td>None. Percentage of water is greater than 20%</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>&lt; 0.1 mm Hg</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.02</td>
</tr>
<tr>
<td>Density</td>
<td>1.02 kg/l (8.49 lbs/gal)</td>
</tr>
<tr>
<td>Solubility</td>
<td>Water: Complete</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>Not determined</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

#### 9.2. Other information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC content</td>
<td>0 %</td>
</tr>
</tbody>
</table>
SECTION 10: Stability and reactivity

10.1. Reactivity
Stable.

10.2. Chemical stability
Stable.

10.3. Possibility of hazardous reactions
Hazardous polymerization will not occur.

10.4. Conditions to avoid
Heat. Open flame. Sparks.

10.5. Incompatible materials
Keep away from strong acids, strong bases and oxidizing agents.

10.6. Hazardous decomposition products
Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity : Not classified

propylene glycol (57-55-6)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>20000 mg/kg (Rat; Experimental value)</td>
</tr>
<tr>
<td>LD50 dermal rat</td>
<td>22500 mg/kg (Rat; Experimental value)</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>20800 mg/kg (Rabbit; Experimental value)</td>
</tr>
<tr>
<td>ATE US (oral)</td>
<td>20000 mg/kg bodyweight</td>
</tr>
<tr>
<td>ATE US (dermal)</td>
<td>20800 mg/kg bodyweight</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation : Not classified  
 pH: 9 - 10

Serious eye damage/irritation : Not classified  
 pH: 9 - 10

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/effects after skin contact : Contact during a long period may cause light irritation.

Symptoms/effects after eye contact : May cause slight irritation.

Symptoms/effects after ingestion : Excessive ingestion may cause central nervous system effects.

SECTION 12: Ecological information

12.1. Toxicity

propylene glycol (57-55-6)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
<td>51,600.00 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Experimental value)</td>
</tr>
<tr>
<td>LC50 fish 2</td>
<td>51,600.00 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Oncorhynchus mykiss)</td>
</tr>
<tr>
<td>ErC50 (algae)</td>
<td>24,200.00 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
propylene glycol (57-55-6)

Biochemical oxygen demand (BOD): 0.96 - 1.08 g O₂/g substance

Chemical oxygen demand (COD): 1.63 g O₂/g substance

ThOD: 1.69 g O₂/g substance

12.3. Bioaccumulative potential

propylene glycol (57-55-6)

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCF other aquatic organisms 1</td>
<td>0.09</td>
</tr>
<tr>
<td>Log Pow</td>
<td>-1.41 - -0.30</td>
</tr>
<tr>
<td></td>
<td>(-0.92: Experimental value; -1.07: Experimental value; Equivalent or similar to OECD 107; 20.5 °C)</td>
</tr>
<tr>
<td>Bioaccumulative potential</td>
<td>Not bioaccumulative</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

propylene glycol (57-55-6)

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface tension</td>
<td>71.60 mN/m (21.5 °C, 1.01 g/l, EU Method A.5: Surface tension)</td>
</tr>
<tr>
<td>Log Koc</td>
<td>0.46 (log Koc, Calculated value)</td>
</tr>
<tr>
<td>Ecology - soil</td>
<td>Highly mobile in soil.</td>
</tr>
</tbody>
</table>

12.5. Other adverse effects

Effect on the ozone layer: No known effect on the ozone layer

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations: Dispose of contents/container to appropriate waste disposal facility, in accordance with local/regional/national/international regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

Transportation of Dangerous Goods

Refer to current TDG Canada for further Canadian regulations

ADR

Not regulated

Transport by sea

In accordance with IMDG / IMO

Not regulated

Air transport

In accordance with IATA / ICAO

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations
Thermal Charge PG Orange 30/70 Prediluted Heat Transfer Fluid

EPA TSCA Regulatory Flag

Toxic Substances Control Act (TSCA): The intentional ingredients of this product are listed

water (7732-18-5)

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

15.2. International regulations

CANADA

Thermal Charge PG Orange 30/70 Prediluted Heat Transfer Fluid

WHMIS Classification

This SDS has been prepared according to the criteria of the Hazardous Products Regulations (HPR) (WHMIS 2015) and the SDS contains all of the information required by the HPR. Applicable GHS information is listed in section 2.2 of this SDS.

15.3. US State regulations

California Proposition 65 - This product does not contain any substance(s) known to the state of California to cause cancer, developmental toxicity and/or reproductive toxicity

propylene glycol (57-55-6)

U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Revision date : 04/01/2020

Full text of H-statements:

NFPA health hazard : 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.

SDS GHS US (GHS HazCom 2012) OWI 1

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