1 Identification

- Product identifier
  - Trade name: Polycool PG-20 060320
  - Recommended use: Heat transfer fluid
  - Restrictions on use: For industrial use only
- Details of the supplier of the safety data sheet
  - Manufacturer/Supplier: Kitpackers, LLC
    - N109 W13300 Ellsworth Drive
    - Germantown, WI 53022
    - 1-877-259-1669
    - www.kitpackers.com
  - Emergency Telephone Number: North America - Chemtrec: 1-800-424-9300 (24 hours)

2 Hazard(s) identification

- Classification of the substance or mixture: The product is not classified, according to the Globally Harmonized System (GHS).
- Label elements
  - GHS label elements: Not classified
  - Hazard pictograms: Not classified
  - Signal word: Not classified
  - Hazard statements: Not classified
- Classification system:
  - NFPA System
    - NFPA ratings (scale 0 - 4)
      - Health = 1
      - Fire = 1
      - Reactivity = 0
  - NFPA special hazards (water reactivity and oxidizing property): None
- HMIS System
  - HMIS-ratings (scale 0 - 4)
    - HEALTH = 1
    - FIRE = 1
    - REACTIVITY = 0
- Other hazards
  - Results of PBT and vPvB assessment
    - PBT: Not applicable
    - vPvB: Not applicable

3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Dangerous components:
  - CAS: 57-55-6
  - EINECS: 200-338-0
  - Propylene glycol >99.8%
- Additional information:
  - If the chemical name/CAS number is proprietary and or weight percentage is listed as a range, the specific chemical identity and or percentage of composition has been withheld as a trade secret.

4 First-aid measures

- Description of first aid measures
  - General information: No special measures required.
  - After inhalation: Remove victim from exposure to fresh air. Keep person at rest. Provide oxygen if person not breathing.
  - After skin contact:
    - Immediately wash with water and soap and rinse thoroughly.
    - If skin rash or irritation occurs, seek medical advice.
    - Remove all contaminated clothing and wash before reuse.
  - After eye contact:
    - Rinse opened eye for several minutes under running water.
    - Remove contact lenses if present and easy to do so; continue rinsing.
    - If symptoms develop seek medical attention.
  - After swallowing:
    - If victim is unconscious; never give anything by mouth.
    - If victim is conscious, rinse out mouth with water.
    - Get medical attention
- Information for doctor:
  - Most important symptoms and effects, both acute and delayed: No further relevant information available.
  - Indication of any immediate medical attention and special treatment needed
    - Check section 11 Toxicological Information for further relevant information.

(Contd. on page 2)
5 Fire-fighting measures

- Extinguishing media
  - Suitable extinguishing agents:
    - Alcohol resistant foam
    - dry chemical
    - Carbon dioxide
    - Water spray
    - Dry sand
  - For safety reasons unsuitable extinguishing agents: Water with full jet
- Special hazards arising from the substance or mixture
  - Will not burn unless preheated.
  - Carbon dioxide (CO₂) and Carbon monoxide (CO)
- Advice for firefighters
  - Protective equipment:
    - If employees are expected to fight fires, they must be trained and equipped as stated in the OSHA fire brigades standard (29 CFR 1910.156).
    - As with any fire, wear positive-pressure self-contained breathing apparatus and full protective gear that are NIOSH approved.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions: Inform respective authorities in case of seepage into water course or sewage system.
- Methods and material for containment and cleaning up:
  - For large spills: provide diking or containment to minimize spreading. If possible pump and store material in appropriate container.
  - For small spills: Ventilate and wash area. Collect spills and absorbent material in appropriate container.
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

7 Handling and storage

- Handling:
  - Precautions for safe handling
    - No special measures required.
    - Keep away from incompatible material(s).
    - Avoid any release into the environment.
    - Do not breathe dust/fumes/mist/vapor/spray.
    - Avoid contact with eyes, skin and clothing.
    - Keep away from heat, sparks, flames and ignition sources.
    - Observe all the personal protection requirements in Section 8.
- Conditions for safe storage, including any incompatibilities
  - Storage:
    - Requirements to be met by storerooms and receptacles: Keep stored in accordance with local, regional, national, and international regulations.

8 Exposure controls/personal protection

- Control parameters
  - Components with limit values that require monitoring at the workplace:
    - 57-55-6 Propylene glycol
      - WEEL [Long-term value]: 10 mg/m³
  - Additional Occupational Exposure Limit Values for possible hazards during processing: None.
- Exposure controls
  - If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.
  - Personal protective equipment:
    - General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed.
    - Personal Protective Equipment (PPE)
      - Breathing equipment:
        - Sufficient ventilation in pattern and volume should be provided in order to maintain air contaminant levels below recommended exposure limits.
        - Use a NIOSH approved air-purifying organic vapor respirator if occupational limits are exceeded. For emergency situations, confined space use, or other conditions where exposure limits may be greatly exceeded, use an approved air supplied respirator. Observe OSHA regulations (29CFR 1910.134) for respirator use.
      - Protection of hands:
        - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
        - Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
        - Material of gloves
          - Chemical resistant gloves
9 Physical and chemical properties

- **Appearance:** Liquid
- **Color:** Clear to yellow
- **Odor:** Characteristic
- **Odor threshold:** Not determined.
- **pH-value:** 8-9.5
- **Melting point/Melting range:** Undetermined.
- **Boiling point/Boiling range:** Undetermined.
- **Flash point:** >93 °C (>199.4 °F)
- **Flammability (solid, gaseous):** Not applicable.
- **Ignition temperature:** 370 °C (698 °F)
- **Decomposition temperature:** Not determined.
- **Auto igniting:** Product is not selfigniting.
- **Explosion limits:**
  - Lower: 2.6 Vol %
  - Upper: 12.5 Vol %
- **Vapor pressure:** Not determined.
- **Vapor Density:** Not determined
- **Density at 20 °C (68 °F):** 1.03 g/cm³ (8.6 lbs/gal)
- **Relative density:** Not determined.
- **Vapor density:** Not determined.
- **Evaporation rate:** Not determined.
- **Solubility in / Miscibility with:**
  - Water: Soluble.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
  - Dynamic: Not available.
  - Kinematic: Not determined.
  - Water: 2.5 %

10 Stability and reactivity

- **Reactivity:** No further relevant information available.
- **Hazardous Reactivity and Chemical Stability:** Stable under normal conditions of use, storage and temperatures.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:**
  - In contact with incompatible materials.
  - No dangerous reactions known.
- **Conditions to avoid:**
  - Direct sunlight and extremely high or low temperatures.
  - Keep away from heat, sparks, flame and any other ignition sources.
- **Incompatible materials:**
  - Strong acids
  - Strong bases
- **Hazardous decomposition products:** Refer to section 5.
11 Toxicological information

- Information on toxicological effects
  - Acute toxicity:
    - LD/LC50 values that are relevant for classification:
      - 57-55-6 Propylene glycol
        - Oral LD50 20,800 mg/kg (rat) (test methods not specified)
        - Dermal LD50 20,800 mg/kg (rabbit)
        - Inhalative LC50/4 h mg/l (No data available)
      - 7732-18-5 Water, distilled
        - Oral LD50 42,860 mg/kg (Human) (TDLo; man)
        - Dermal LD50 mg/kg (No data available)
        - Inhalative LC50/4 h mg/l (No data available)
  - Primary irritant effect:
    - on the skin: No irritant effect.
    - on the eye: No irritating effect.
  - Sensitization: No sensitizing effects known.
  - Additional toxicological information:
    - The product is not subject to classification according to internally approved calculation methods for preparations:
    - When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- Carcinogenic categories
  - IARC (International Agency for Research on Cancer)
    - None of the ingredients is listed.
  - NTP (National Toxicology Program)
    - None of the ingredients is listed.
  - OSHA-Ca (Occupational Safety & Health Administration)
    - None of the ingredients is listed.

12 Ecological information

- Persistence and degradability
  - Bioaccumulative potential
    - No data available.
  - Persistence in soil
    - No further relevant information available.
  - Additional ecological information:
    - The product is non-rapid degradable, and low or not highly bioaccumulative.
    - General notes:
      - Water hazard class 1 (Self-assessment): slightly hazardous for water
      - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
  - Results of PBT and vPvB assessment
    - PBT: None of the ingredients is listed.
    - vPvB: None of the ingredients is listed.
  - Other adverse effects
    - No further relevant information available.

13 Disposal considerations

- Waste treatment methods
  - Recommendation: Dispose of according to your local waste regulations.
- Uncleaned packagings:
  - Recommendation: Dispose of according to your local waste regulations.

14 Transport information

- UN-Number
  - DOT, IMDG, IATA not regulated
- UN proper shipping name
  - DOT, IMDG, IATA not regulated
- Transport hazard class(es)
  - DOT, ADN, IMDG, IATA
    - Class not regulated
- Packing group
  - DOT, IMDG, IATA not regulated
- Environmental hazards:
  - Not applicable.
- Special precautions for user
  - Not applicable.
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
  - Not applicable.
15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  
  - SARA Section 355 (extremely hazardous substances):
    None of the ingredients is listed.
  
  - SARA Section 313 (Specific toxic chemical listings):
    None of the ingredients is listed.
  
  - Section 311/312 (Hazardous Chemical Inventory Reporting):
    None of the ingredients is listed.
  
  - Hazard Abbreviations for SARA 311/312
    A - Acute Health Hazard
    C - Chronic Health Hazard
    F - Fire Hazard
    R - Reactive Hazard
    S - Sudden Release of Pressure Hazard

- TSCA 8 (b) Inventory:
  
<table>
<thead>
<tr>
<th>Chemical</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>57-55-6 Propylene glycol</td>
<td>ACTIVE</td>
</tr>
<tr>
<td>7732-18-5 Water, distilled</td>
<td>ACTIVE</td>
</tr>
</tbody>
</table>

- Hazardous Air Pollutants
  None of the ingredients is listed.

- Proposition 65
  None of the ingredients is listed.

- Chemicals known to cause cancer:
  None of the ingredients is listed.

- Chemicals known to cause reproductive toxicity for females:
  None of the ingredients is listed.

- Chemicals known to cause reproductive toxicity for males:
  None of the ingredients is listed.

- Chemicals known to cause developmental toxicity:
  None of the ingredients is listed.

- Carcinogenic categories
  None of the ingredients is listed.

- EPA (Environmental Protection Agency)
  None of the ingredients is listed.

- TLV (Threshold Limit Value established by ACGIH)
  None of the ingredients is listed.

- NIOSH-Ca (National Institute for Occupational Safety and Health)
  None of the ingredients is listed.

- International Regulation Lists
  
  - REACh - Substances of Very High Concern (SVHC) List:
    None of the ingredients is listed.
  
  - Restriction of Hazardous Substances Directive (RoHS) list:
    None of the ingredients is listed.

- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Date of preparation / last revision 06/28/2019 / 1
- * Data compared to the previous version altered.