1 Identification

- **Product identifier**
  - **Trade name:** Polycool HC-50 060330
  - **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**
  - Skin Irrit. 2 H315 Causes skin irritation.
  - Eye Dam. 2B H320 Causes eye irritation.

- **Label elements**
  - **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
    - **Hazard pictograms**

  - **Signal word** Warning
  - **Hazard statements**
    - H315+H320 Causes skin and eye irritation.
    - Precautionary statements
      - Wash thoroughly after handling.
      - Wear protective gloves/protective clothing/eye protection/face protection.
      - If on skin: Wash with plenty of water.
      - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
      - If skin irritation occurs: Get medical advice/attention.
      - Take off contaminated clothing and wash it before reuse.
      - If eye irritation persists: Get medical advice/attention.

- **Classification system:**
  - **NFPA System**
    - **NFPA ratings (scale 0 - 4)**
      - Health = 0
      - Fire = 0
      - Reactivity = 0
  - **HMIS System**
    - **HMIS-ratings (scale 0 - 4)**
      - Health = 1
      - Fire = 0
      - 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: 590-29-4 EINECS: 209-677-9 Potassium formate

4 First-aid measures

- **Description of first aid measures**
  - **General information:** No special measures required.
  - **After inhalation:** If breathed in, move person to fresh air. If not breathing give artificial respiration. Consult a physician.

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After skin contact:
Gently wash skin with soap and water. Consult a physician.

After eye contact:
Immediately flush opened eyes with water for 5 minutes, then remove contact lenses if present, continue flushing for at least another 15 minutes. Consult a physician.

After swallowing:
If victim is unconscious; never give anything by mouth. If victim is conscious, rinse out mouth with water. Consult a doctor.

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.

5 Fire-fighting measures

Extinguishing media:
Suitable extinguishing agents:
Use fire fighting measures that suit the environment.
Carbon dioxide
Water spray
Alcohol resistant foam
dry chemical

Special hazards arising from the substance or mixture:
Will not burn unless preheated.
Irritating vapors
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:
Use proper PPE. In the case of an uncontrolled release, clear the affected area, protect people and respond with trained personnel. Avoid breathing vapors and ensure adequate ventilation.

Environmental precautions:
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.

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 absorbant 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:
General hygiene considerations:
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the day.
Use in a well-ventilated location. Open drums and other containers of the product slowly, on a stable surface. Drums and other containers of this product should be properly labeled. Keep containers tightly closed.

Conditions for safe storage, including any incompatibilities:
Move drums of this product carefully, with the appropriate drum handling equipment. Store drums and other containers in cool, dry locations, away from direct sunlight, or sources of intense heat. Storage areas should be made of fire-resistant materials. Keep containers away from incompatible chemicals.

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:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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

• Eye protection:

Safety Glasses with side shields

• Body protection: Appropriate chemical resistant clothing.

• Limitation and supervision of exposure into the environment

The Engineering measures or controls, and PPE recommendations are only guidelines and may not apply to every situation. For additional information, please consult the corresponding requirements under OSHA 29 CFR 1910.94-95, and 29 CFR 1910.132-138.

9 Physical and chemical properties

• Information on basic physical and chemical properties

  • General Information
    • Appearance: Liquid
    • Form: clear to yellow
    • Odor: Odorless
    • Odor threshold: Not determined.
  • pH-value: 7-11
  • Change in condition
    • Melting point/Melting range: <0 °C (<32 °F)
    • Boiling point/Boiling range: >100 °C (>212 °F)
  • Flash point: Not applicable.
  • Flammability (solid, gaseous): Not applicable.
  • Ignition temperature: Not determined.
  • Decomposition temperature: Not determined.
  • Auto igniting: Product is not selfigniting.
  • Danger of explosion: Product does not present an explosion hazard.
  • Explosion limits: Not determined.
    • Lower: Not determined.
    • Upper: Not determined.
  • Vapor pressure: Not determined.
  • Vapor Density: not determined
  • Density at 20 °C (68 °F): >1 g/cm³ (>8.35 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.
  • VOC content: 0.00 %
    • 0.0 g/l / 0.00 lb/gal

10 Stability and reactivity

• Reactivity No further relevant information available.
### 4.3.6 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.
- Conditions to avoid: Keep away from heat, sparks, flame and any other ignition sources.
- Incompatible materials: Strong reducing agents, Acids, Oxidizing agents, acid chlorides, acid anhydrides, hypochlorites, chloroformates.
- Hazardous decomposition products: Refer to section 5.

### 11 Toxicological Information

#### Information on toxicological effects

- **Acute toxicity:**
  - LD/LC50 values that are relevant for classification:
    - **S90-28-4 potassium formate**
      - Oral LD50: 5,500 mg/kg (mouse)
    - **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**: No further relevant information available.
- **Behavior in environmental systems**:
  - Bioaccumulative potential: No data available.
  - Mobility 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.

UN "Model Regulation":
  not regulated

## 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:**
  All components have the value ACTIVE.

- **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.

- **New Jersey Right-to-Know List:**
  None of the ingredients is listed.

- **New Jersey Special Hazardous Substance List:**
  None of the ingredients is listed.

- **Pennsylvania Right-to-Know List:**
  None of the ingredients is listed.

- **Pennsylvania Special Hazardous Substance List:**
  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**
  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 07/15/2019 / -
- * Data compared to the previous version altered.