1 Identification

- **Product identifier**

  - **Product name:** Yttrium Standard: 1000 µg/g Y in 75 cSt Hydrocarbon Oil [50g bottle]
  
  - **Part number:** 5190-8795

- **Application of the substance / the mixture**

  Reagents and Standards for Analytical Chemical Laboratory Use

- **Details of the supplier of the safety data sheet**

  - **Manufacturer/Supplier:** Agilent Technologies, Inc.
    
    5301 Stevens Creek Blvd
    
    Santa Clara, CA 95051
    
    USA
  
  - **Information department:** e-mail: pdl-msds_author@agilent.com
  
  - **Emergency telephone number:** CHEMTREC®: 1-800-424-9300

2 Hazard identification

- **Classification of the substance or mixture**

  - **GHS08 Health hazard**
  
  Aspiration Hazard - Category 1  H304  May be fatal if swallowed and enters airways.

- **Label elements**

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

- **Hazard pictograms**

  - **GHS08**

  - **Signal word** Danger

- **Hazard-determining components of labeling:**

  White mineral oil, petroleum

- **Hazard statements**

  H304 May be fatal if swallowed and enters airways.

- **Precautionary statements**

  P301+P310 If swallowed: Immediately call a poison center/doctor.
  
  P331 Do NOT induce vomiting.
  
  P405 Store locked up.
  
  P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**

  - **NFPA ratings (scale 0 - 4)**
    
    Health = 0
  
    Fire = 1
  
    Reactivity = 0

(Contd. on page 2)
Safety Data Sheet  
according to HPR, Schedule 1  

Product name: Yttrium Standard: 1000 μg/g Y in 75 cSt Hydrocarbon Oil [50g bottle]

- **HMIS-ratings (scale 0 - 4)**
  - Health = 0
  - Fire = 1
  - Reactivity = 0

### 3 Composition/Information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Also contains substances at levels not considered to be hazardous.

**Dangerous components:**

- CAS: 8042-47-5
- RTECS: PY8047000
- White mineral oil, petroleum
- >80%-<100% w/w
- Aspiration Hazard - Category 1, H304
- Actual concentration ranges are withheld as a trade secret.

### 4 First aid measures

- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:**
  - Rinse mouth. Do not induce vomiting.
  - Immediately call 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: No further relevant information available.

### 5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture**
  - Formation of toxic gases is possible during heating or in case of fire.
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
  - Wear protective clothing.
- **Environmental precautions:** Do not allow to enter sewers/surface or ground water.
- **Methods and material for containment and cleaning up:**
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  - Dispose contaminated material as waste according to item 13.
- **Reference to other sections**
  - See Section 7 for information on safe handling.
7 Handling and storage

- **Handling:**
- **Precautions for safe handling:** Store in cool, dry place in tightly closed receptacles.
- **Conditions for safe storage, including any incompatibilities:**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
  - Please refer to the manufacturers certificate for specific storage and transport temperature conditions.
  - Store only in the original receptacle unless other advice is given on the CoA.
  - Keep container in a well-ventilated place. Keep away from sources of ignition and heat.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s):** No further relevant information available.

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 information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**
- **Personal protective equipment:**
  - **General protective and hygienic measures:**
    - Keep away from foodstuffs, beverages and feed.
    - Wash hands before breaks and at the end of work.
  - **Breathing equipment:**
    - Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
  - **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.
    - The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374.
    - **Material of gloves**
      - Nitrile rubber, NBR
      - Natural rubber, NR
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td></td>
</tr>
<tr>
<td>Form</td>
<td>Oily</td>
</tr>
<tr>
<td>Color</td>
<td>Light green</td>
</tr>
<tr>
<td>Odor</td>
<td>Mineral-oil-like</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>pH-value</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Change in condition</strong></td>
<td></td>
</tr>
<tr>
<td>Melting point/Melting range</td>
<td>Not determined</td>
</tr>
<tr>
<td>Melting range</td>
<td>Not determined</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>218 °C</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>115 °C</td>
</tr>
<tr>
<td><strong>Flammability (solid, gaseous)</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td>Auto igniting</td>
<td>Product is not self-igniting</td>
</tr>
<tr>
<td>Danger of explosion</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Explosion limits</strong></td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>Not determined</td>
</tr>
<tr>
<td>Upper</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Vapor pressure</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Density at 20 °C</strong></td>
<td>0.862 g/cm³</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Vapor density</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Solubility in / Miscibility with Water</strong></td>
<td>Not miscible or difficult to mix</td>
</tr>
<tr>
<td><strong>Partition coefficient (n-octanol/water)</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td></td>
</tr>
<tr>
<td>Dynamic</td>
<td>Not determined</td>
</tr>
<tr>
<td>Kinematic</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Other information</strong></td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>
10 Stability and reactivity

- Reactivity
  Stable under normal conditions.
  No further relevant information available.
- Chemical stability
  Stable under normal conditions.
- Thermal decomposition / conditions to be avoided:
  Formation of toxic gases is possible during heating or in case of fire.
- Possibility of hazardous reactions
  No dangerous reactions known.
- Conditions to avoid
  Heat.
- Incompatible materials:
  Strong oxidizing agents.
- Hazardous decomposition products:
  Formation of toxic gases is possible during heating or in case of fire.

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
  - LD/LC50 values that are relevant for classification:
    | CAS: 8042-47-5 White mineral oil, petroleum |
    | Oral LD50 >5,000 mg/kg (rat) |
- Primary irritant effect:
  - on the skin: Based on available data, the classification criteria are not met.
  - on the eye: Based on available data, the classification criteria are not met.
- Sensitization: Based on available data, the classification criteria are not met.
- Additional toxicological information:
  The product shows the following dangers according to internally approved calculation methods for preparations:
- 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.

12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.
- Behavior in environmental systems:
  - Bioaccumulative potential: No further relevant information available.
  - Mobility in soil: No further relevant information available.
- Additional ecological information:
  - 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.
49.2.0 Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.
- Other adverse effects: No further relevant information available.

13 Disposal considerations
- Waste treatment methods
  Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packagings:
  Recommendation: Dispose in accordance with national regulations.

14 Transport information
- UN-Number
- DOT/TDG, ADR, IMDG, IATA: Not applicable
- DOT/TDG, ADR, IMDG, IATA: Not applicable
- Transport hazard class(es)
- DOT, ADR, ADN, IMDG, IATA: Not applicable
- Class: Not applicable
- Packing group
- DOT/TDG, ADR, IMDG, IATA: Not applicable
- 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 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.
- Section 313 (Specific toxic chemical listings):
  None of the ingredients is listed.
- TSCA (Toxic Substances Control Act):
  CAS: 8042-47-5 White mineral oil, petroleum
Product name: Yttrium Standard: 1000 µg/g Y in 75 cSt Hydrocarbon Oil [50g bottle]

- Canadian substance listings:
  - Canadian Domestic Substances List (DSL)
    | CAS: 8042-47-5 | White mineral oil, petroleum |
  - Canadian Ingredient Disclosure list (limit 0.1%)
    None of the ingredients is listed.
  - Canadian Ingredient Disclosure list (limit 1%)
    None of the ingredients is listed.

- Hazard pictograms
  - GHS08

- Signal word Danger

- Hazard-determining components of labeling:
  - White mineral oil, petroleum

- Hazard statements
  - H304 May be fatal if swallowed and enters airways.

- Precautionary statements
  - P301+P310 If swallowed: Immediately call a poison center/doctor.
  - P331 Do NOT induce vomiting.
  - P405 Store locked up.
  - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

16 Other information

The information contained in this document is based on Agilent’s state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.

- Date of the latest revision of the safety data sheet 03/20/2020 / -

- Abbreviations and acronyms:
  - IMDG: International Maritime Code for Dangerous Goods
  - DOT: US Department of Transportation
  - IATA: International Air Transport Association
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - ELINCS: European List of Notified Chemical Substances
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - NFPA: National Fire Protection Association (USA)
  - HMIS: Hazardous Materials Identification System (USA)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative

- Sources

- Data compared to the previous version altered: All sections have been updated.