1 Identification

- **Product identifier**
- **Trade name:** Aroclor 1248, 100 ug/mL in PCB free transformer oil (1 X 2 mL)
- **Part number:** 1248TK-1
- **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:**
  Telephone: 800-227-9770
  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
  - Carcinogenicity - Category 1B  H350  May cause cancer.
  - **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:**
  Distillates (petroleum), hydrotreated light naphthenic
- **Hazard statements**
  May cause cancer.
- **Precautionary statements**
  If medical advice is needed, have product container or label at hand.
  Keep out of reach of children.
  Read label before use.
  Obtain special instructions before use.
  Do not handle until all safety precautions have been read and understood.
  Wear protective gloves/protective clothing/eye protection/face protection.
  IF exposed or concerned: Get medical advice/attention.
  Store locked up.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)
Trade name: Aroclor 1248, 100 ug/mL in PCB free transformer oil (1 X 2 mL)

- Classification system:
  - NFPA ratings (scale 0 - 4)
    - Health = 0
    - Fire = 1
    - Reactivity = 0

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

3 Composition/Information on ingredients

- Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.

- Dangerous components:
  - 64742-53-6 Distillates (petroleum), hydrotreated light naphthenic 99.989% w/w

4 First aid measures

- Description of first aid measures
  - After inhalation: Supply fresh air; consult doctor in case of complaints.
  - After skin contact: Generally the product does not irritate the skin.
  - After eye contact: Rinse opened eye for several minutes under running water.
  - After swallowing: If symptoms persist consult 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: No further relevant information available.
- Advice for firefighters
- Protective equipment: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures: Not required.
- 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.
  - Ensure adequate ventilation.
7 Handling and storage

- Handling:
  - Precautions for safe handling
    Ensure good ventilation/exhaustion at the workplace.
    Open and handle receptacle with care.
  - Information about protection against explosions and fires: Keep respiratory protective device available.
  - Conditions for safe storage, including any incompatibilities
  - Storage:
    - Requirements to be met by storerooms and receptacles: No special requirements.
    - Information about storage in one common storage facility: Not required.
    - Further information about storage conditions: Keep receptacle tightly sealed.
  - Specific end use(s) No further relevant information available.

8 Exposure controls/ Personal protection

- Additional information about design of technical systems: No further data; see item 7.
- 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.
    Store protective clothing separately.
  - Breathing equipment:
    When used as intended with Agilent instruments, the use of the product under normal laboratory conditions and with standard practices does not result in significant airborne exposures and therefore respiratory protection is not needed.
    Under an emergency condition where a respirator is deemed necessary, use a NIOSH or equivalent approved device/equipment with appropriate organic or acid gas cartridge.
  - Protection of hands:
    Although not recommended for constant contact with the chemicals or for clean-up, nitrile gloves 11-13 mil thickness are recommended for normal use. The breakthrough time is 1 hr. For cleaning a spill where there is direct contact of the chemical, butyl rubber gloves are recommended 12-15 mil thickness with breakthrough times exceeding 4 hrs. Supplier recommendations should be followed.
  - Material of gloves
    For normal use: nitrile rubber, 11-13 mil thickness
    For direct contact with the chemical: butyl rubber, 12-15 mil thickness

(Contd. on page 4)
Trade name: Aroclor 1248, 100 μg/mL in PCB free transformer oil (1 X 2 mL)  

- Penetration time of glove material  
  For normal use: nitrile rubber: 1 hour  
  For direct contact with the chemical: butyl rubber: >4 hours  
- Eye protection:  
  Tightly sealed goggles

### 9 Physical and chemical properties

<table>
<thead>
<tr>
<th>Information on basic physical and chemical properties</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>General Information</td>
<td></td>
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<tr>
<td>Appearance:</td>
<td></td>
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<tr>
<td>Form: Fluid</td>
<td></td>
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<tr>
<td>Color: According to product specification</td>
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<tr>
<td>Odor: Characteristic</td>
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<tr>
<td>Odor threshold: Not determined.</td>
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<tr>
<td>pH-value: Not determined.</td>
<td></td>
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<tr>
<td>Change in condition</td>
<td></td>
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<tr>
<td>Melting point/Melting range: Undetermined.</td>
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<tr>
<td>Boiling point/Boiling range: Undetermined.</td>
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<tr>
<td>Flash point: &gt;145 °C</td>
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<tr>
<td>Flammability (solid, gaseous): Not applicable.</td>
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<tr>
<td>Decomposition temperature: Not determined.</td>
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<tr>
<td>Auto igniting: Product is not selfigniting.</td>
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<tr>
<td>Danger of explosion: Product does not present an explosion hazard.</td>
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<tr>
<td>Explosion limits:</td>
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<tr>
<td>Lower: Not determined.</td>
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<tr>
<td>Upper: Not determined.</td>
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<tr>
<td>Vapor pressure at 20 °C: 0.1 hPa</td>
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<tr>
<td>Density at 20 °C: 0.88 g/cm³</td>
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<tr>
<td>Relative density: Not determined.</td>
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<tr>
<td>Vapor density: Not determined.</td>
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<tr>
<td>Evaporation rate: Not determined.</td>
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<tr>
<td>Solubility in / Miscibility with Water: Not miscible or difficult to mix.</td>
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<tr>
<td>Partition coefficient (n-octanol/water): Not determined.</td>
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<tr>
<td>Viscosity:</td>
<td></td>
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<tr>
<td>Dynamic: Not determined.</td>
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<tr>
<td>Kinematic: Not determined.</td>
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</tbody>
</table>
10 Stability and reactivity

- Reactivity: No further relevant information available.
- Chemical stability: No further relevant information available.
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions: No dangerous reactions known.
- Conditions to avoid: No further relevant information available.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
  - Acute toxicity:
    - LD/LC50 values that are relevant for classification:
      - ATE (Acute Toxicity Estimate)
        - Dermal LD50: >2,000 mg/kg (rabbit)
        - Inhalative LC50/4 h: 2,180 mg/L (rat)
      - 64742-53-6 Distillates (petroleum), hydrotreated light naphthenic
        - Oral LD50: >5,000 mg/kg (rat)
        - Dermal LD50: >2,000 mg/kg (rabbit)
        - Inhalative LC50/4 h: 2,180 mg/L (rat)
    - 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 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.
48.1.26

· 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 3 (Self-assessment): extremely hazardous for water
    Do not allow product to reach ground water, water course or sewage system, even in small quantities.
    Danger to drinking water if even extremely small quantities leak into the ground.
· 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: Disposal must be made according to official regulations.

14 Transport information

· UN-Number
  · DOT, TDG, ADN, IMDG, IATA: not regulated
· UN proper shipping name
  · DOT, TDG, ADN, IMDG, IATA: not regulated
· Transport hazard class(es)
  · DOT, TDG, ADN, IMDG, IATA: not regulated
· Packing group
  · DOT, TDG, 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.
  - Section 313 (Specific toxic chemical listings):
    None of the ingredients is listed.
- TSCA (Toxic Substances Control Act):
  - 64742-53-6 Distillates (petroleum), hydrotreated light naphthenic
- Canadian substance listings:
  - Canadian Domestic Substances List (DSL)
    - 64742-53-6 Distillates (petroleum), hydrotreated light naphthenic
  - 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.
- National regulations:
  - Information about limitation of use:
    Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.
  - 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 03/31/2019 / -
- 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