# 1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** Dicapthon
- **Part number:** PST-1070
- **CAS Number:** 2463-84-5
- **Relevant identified uses of the substance or mixture and uses advised against**
  Reagents and Standards for Analytical Chemical Laboratory Use
- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:** Agilent Technologies Manufacturing GmbH & Co. KG
    Hewlett-Packard-Str.8
    76337 Waldbronn
    Germany
  - **Further information obtainable from:**
    Telephone: 0800 603 1000
    pdl-msds_author@agilent.com
  - **Emergency telephone number:** CHEMTREC®: +(44)-870-8200418

# 2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
  - GHS06 skull and crossbones
  - Acute Tox. 3 H301 Toxic if swallowed.
  - Acute Tox. 3 H311 Toxic in contact with skin.
- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
  The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms**
  - GHS06
- **Signal word** Danger
- **Hazard-determining components of labelling:**
  - dicapthon
- **Hazard statements**
  - H301+H311 Toxic if swallowed or in contact with skin.
- **Precautionary statements**
  - P101 If medical advice is needed, have product container or label at hand.
  - P102 Keep out of reach of children.
  - P103 Read label before use.
  - P264 Wash thoroughly after handling.
  - P270 Do not eat, drink or smoke when using this product.
  - P280 Wear protective gloves / protective clothing.

(Contd. on page 2)
Trade name: Dicapthon

48.1.26

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P321 Specific treatment (see on this label).
P330 Rinse mouth.
P302+P352 IF ON SKIN: Wash with plenty of water.
P312 Call a POISON CENTER/doctor if you feel unwell.
P361+P364 Take off immediately all contaminated clothing and wash it before reuse.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Other hazards
  · Results of PBT and vPvB assessment
    · PBT: Not applicable.
    · vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterisation: Substances
· CAS No. Description
  2463-84-5 dicapthon

* 4 First aid measures

· Description of first aid measures
· General information:
  Immediately remove any clothing soiled by the product.
  In case of irregular breathing or respiratory arrest provide artificial respiration.
· 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. Then consult a doctor.
· After swallowing: Do not induce vomiting; call for medical help immediately.
· 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 extinguishing methods suitable to surrounding conditions.
· 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:
  Dispose contaminated material as waste according to item 13.
7 Handling and storage

- **Handling:**
  - **Precautions for safe handling:** Thorough dusting.
  - **Information about fire - and explosion protection:** No special measures required.

- **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 container tightly sealed.
  - **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
  - **Ingredients with limit values that require monitoring at the workplace:** Not required.
  - **Additional information:** The lists valid during the making were used as basis.

- **Exposure controls**
- **Personal protective equipment:**
  - **General protective and hygienic measures:**
    Keep away from foodstuffs, beverages and feed.
    Immediately remove all soiled and contaminated clothing.
    Wash hands before breaks and at the end of work.
    Store protective clothing separately.
    Avoid contact with the eyes and skin.
  - **Respiratory protection:**
    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 11-13mil thickness are recommended for normal use. The breakthrough time is 1hr. For cleaning a spill where there is direct contact of the chemical, butyl rubber gloves are recommended 12-15mil thickness with breakthrough times exceeding 4hrs. 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
    The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
### 9 Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Information</strong></td>
<td></td>
</tr>
<tr>
<td>Appearance: Form</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance: Colour</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Appearance: Odour</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Appearance: Odour threshold</td>
<td>Not determined.</td>
</tr>
<tr>
<td>pH-value</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Change in condition</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Undetermined.</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>Undetermined.</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Product is not flammable.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Product does not present an explosion hazard.</td>
</tr>
<tr>
<td>Explosion limits:</td>
<td></td>
</tr>
<tr>
<td>Explosion limits: Lower</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Explosion limits: Upper</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Solubility in / Miscibility with water</td>
<td>Insoluble.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Viscosity: Dynamic</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Viscosity: Kinematic</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Solvent content:</td>
<td></td>
</tr>
<tr>
<td>VOC (EC)</td>
<td>0.00 %</td>
</tr>
<tr>
<td>Solids content</td>
<td>100.0 %</td>
</tr>
</tbody>
</table>
10 Stability and reactivity

- Reactivity: No further relevant information available.
- Chemical stability:
  - 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: Toxic if swallowed or in contact with skin.
- LD/LC50 values relevant for classification:

<table>
<thead>
<tr>
<th>ATE (Acute Toxicity Estimates)</th>
<th>Oral</th>
<th>LD50</th>
<th>284 mg/kg (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dermal</td>
<td>LD50</td>
<td>790 mg/kg (rat)</td>
</tr>
</tbody>
</table>

  | 2463-84-5 dicapthon            | Oral   | LD50   | 284 mg/kg (rat) |
  |                                | Dermal | LD50   | 790 mg/kg (rat) |

- Primary irritant effect:
  - Skin corrosion/irritation: Based on available data, the classification criteria are not met.
  - Serious eye damage/irritation: Based on available data, the classification criteria are not met.
  - Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.
  - CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):
  - Germ cell mutagenicity: Based on available data, the classification criteria are not met.
  - Carcinogenicity: Based on available data, the classification criteria are not met.
  - Reproductive toxicity: Based on available data, the classification criteria are not met.
  - STOT-single exposure: Based on available data, the classification criteria are not met.
  - STOT-repeated exposure: Based on available data, the classification criteria are not met.
  - Aspiration hazard: Based on available data, the classification criteria are not met.

12 Ecological information

- Toxicity:
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.
- Behaviour in environmental systems:
  - Bioaccumulative potential: No further relevant information available.
- Mobility in soil: No further relevant information available.
Trade name: Dicapthon

· Additional ecological information:
· General notes: 
  Water hazard class 1 (German Regulation) (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: Not applicable.
    · vPvB: Not applicable.
  · Other adverse effects No further relevant information available.

* 13 Disposal considerations

· Waste treatment methods
  · Recommendation
    Must not be disposed together with household garbage. Do not allow product to reach sewage system.
  · European waste catalogue
    HP 6  Acute Toxicity
  · Uncleaned packaging:
    · Recommendation: Disposal must be made according to official regulations.

* 14 Transport information

· UN-Number
  · ADR, IMDG, IATA  UN2811
  · UN proper shipping name
    · ADR
    · IMDG, IATA
    2811 TOXIC SOLID, ORGANIC, N.O.S. (dicapthon)
    TOXIC SOLID, ORGANIC, N.O.S. (dicapthon)
  · Transport hazard class(es)
    · ADR, IMDG, IATA
    · Class 6.1 Toxic substances.
    · Label 6.1
  · Packing group
    · ADR, IMDG, IATA
    III
  · Environmental hazards:
    Not applicable.
  · Special precautions for user
    Warning: Toxic substances.
  · Danger code (Kemler): 60
  · EMS Number: F-A,S-A
  · Stowage Category A
  · Transport in bulk according to Annex II of Marpol and the IBC Code
    Not applicable.
Transport/Additional information:

- ADR
  - Limited quantities (LQ) 5 kg
  - Excepted quantities (EQ) Code: E1
  Maximum net quantity per inner packaging: 30 g
  Maximum net quantity per outer packaging: 1000 g

- Transport category 2
- Tunnel restriction code E

- IMDG
  - Limited quantities (LQ) 5 kg
  - Excepted quantities (EQ) Code: E1
  Maximum net quantity per inner packaging: 30 g
  Maximum net quantity per outer packaging: 1000 g

- UN "Model Regulation": UN 2811 TOXIC SOLID, ORGANIC, N.O.S. (DICAPTHON), 6.1, III

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Directive 2012/18/EU
- Named dangerous substances - ANNEX I Substance is not listed.
- 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.

- Department issuing SDS: Document Control / Regulatory
- Contact: regulatory@ultrasci.com
- Abbreviations and acronyms:
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  IMDG: International Maritime Code for Dangerous Goods
  IATA: International Air Transport Association
  GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  VOC: Volatile Organic Compounds (USA, EU)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
  PBT: Persistent, Bioaccumulative and Toxic
  vPvB: very Persistent and very Bioaccumulative
  Acute Tox. 3: Acute toxicity – Category 3
- * Data compared to the previous version altered.