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

- **Product identifier**
- **Trade name:** 2-Methylantracene
- **Part number:** RAH-036
- **CAS Number:** 613-12-7
- **EC number:** 210-329-3

2 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**
  
  ![GHS09 environment](image)
  Aquatic Acute 1 H400 Very toxic to aquatic life.

  ![GHS07](image)
  Acute Tox. 4  H302 Harmful if swallowed.
  Acute Tox. 4  H312 Harmful in contact with skin.
  Acute Tox. 4  H332 Harmful if inhaled.

- **Label elements**
- **Labeling according to Regulation (EC) No 1272/2008**
  The substance is classified and labelled according to the CLP regulation.

- **Hazard pictograms**
  
  ![GHS07](image)  ![GHS09](image)

- **Signal word** Warning
- **Hazard-determining components of labelling:**
  2-methylantracene
Trade name: 2-Methylanthracene

· **Hazard statements**
  - H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.
  - H400 Very toxic to aquatic life.

· **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.
  - P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
  - P264 Wash thoroughly after handling.
  - P270 Do not eat, drink or smoke when using this product.
  - P271 Use only outdoors or in a well-ventilated area.
  - P273 Avoid release to the environment.
  - P280 Wear protective gloves / protective clothing.
  - P290 If in contact with the eyes: Rinse under流水 for several minutes.
  - P291 If in contact with the skin: Wipe the product off with a soft cloth or non-scratching material.
  - P293 If swallowed: Do not induce vomiting.
  - P294 If inhaled: Remove to fresh air.
  - P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
  - P302+P352 IF ON SKIN: Wash with plenty of water.
  - P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
  - P321 Specific treatment (see on this label).
  - P330 Rinse mouth.
  - P362+P364 Take off contaminated clothing and wash it before reuse.
  - P391 Collect spillage.
  - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Other hazards**

3 Composition/information on ingredients

· **Chemical characterisation: Substances**
  - CAS No. Description
    - 613-12-7 2-methylanthracene
  - Identification number(s)
    - EC number: 210-329-3

4 First aid measures

· **Description of first aid measures**
  - **General information:**
    - Immediately remove any clothing soiled by the product. Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
  - **After inhalation:**
    - Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.
  - **After skin contact:**
    - Immediately rinse with water.
  - **After eye contact:**
    - Rinse opened eye for several minutes under running water.
  - **After swallowing:**
    - Call for a doctor immediately.

· **Information for doctor:**

  · **Most important symptoms and effects, both acute and delayed** No further relevant information available.
48.1.26

· 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: Mouth respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures: Not required.

· Environmental precautions:
  Do not allow product to reach sewage system or any water course.
  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:
  Dispose contaminated material as waste according to item 13.
  Ensure adequate ventilation.

· Reference to other sections
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

7 Handling and storage

· Handling:
  · Precautions for safe handling
    Thorough dedusting.
    Ensure good ventilation/exhaustion at the workplace.

· 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.
- 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 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
- 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.

**Penetration time of glove material**
- For normal use: nitrile rubber: 1 hour
- For direct contact with the chemical: butyl rubber: > 4 hours

**Eye protection:** Not required.

---

**9 Physical and chemical properties**

- **Information on basic physical and chemical properties**

- **General Information**
  - **Appearance:**
    - **Form:** Powder
    - **Colour:** Light yellow
  - **Odour:** Characteristic
  - **Odour threshold:** Not determined.
  - **pH-value:** Not applicable.

- **Change in condition**
  - **Melting point/freezing point:** 204-206 °C
  - **Initial boiling point and boiling range:** Undetermined.

- **Flash point:** Not applicable.

- **Flammability (solid, gas):** Product is not flammable.

- **Decomposition temperature:** Not determined.

- **Auto-ignition temperature:** Not determined.

- **Explosive properties:** Product does not present an explosion hazard.
10 Stability and reactivity

- **Reactivity**: No further relevant information available.
- **Chemical stability**: 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**: Harmful if swallowed, in contact with skin or if inhaled.

**LD/LC50 values relevant for classification:**

<table>
<thead>
<tr>
<th></th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalative LC50/4 h</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE (Acute Toxicity Estimates)</td>
<td>500 mg/kg</td>
<td>1,100 mg/kg</td>
<td>1.5 mg/L</td>
</tr>
</tbody>
</table>

- **Primary irritant effect**: Based on available data, the classification criteria are not met.
- **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.
Trade name: 2-Methylandracene

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.
    - Ecotoxic effects:
      - Remark: Very toxic for fish
    - 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.
        Very toxic for aquatic organisms
    - 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
  - HP 14 Ecotoxic
- Uncleaned packaging:
  - Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number
  - UN3077
- ADR, IMDG, IATA

(Contd. on page 7)
### UN proper shipping name
- **ADR**: 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2-methylanthracene)
- **IMDG**: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2-methylanthracene), MARINE POLLUTANT
- **IATA**: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2-methylanthracene)

### Transport hazard class(es)
- ADR, IMDG, IATA

#### Class
- 9 Miscellaneous dangerous substances and articles.

#### Label
- 9

### Packing group
- ADR, IMDG, IATA
- **Packing group**: III

### Environmental hazards:
- **Marine pollutant**: Symbol (fish and tree)
- **Special marking (ADR)**: Symbol (fish and tree)
- **Special marking (IATA)**: Symbol (fish and tree)

### Special precautions for user
- **Warning**: Miscellaneous dangerous substances and articles.
- **Danger code (Kemler)**: 90
- **EMS Number**: F-A,S-F
- **Stowage Category**: A

### Transport in bulk according to Annex II of Marpol and the IBC Code
- **Transport category**: 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

#### 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

(Contd. on page 8)
Trade name: 2-Methylantracene

- **UN "Model Regulation":** UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2-METHYLANTHRACENE), 9, 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.
  - Seveso category E1 Hazardous to the Aquatic Environment
  - Qualifying quantity (tonnes) for the application of lower-tier requirements 100 t
  - Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t
  - **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
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - 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. 4: Acute toxicity – Category 4
  - Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
- *Data compared to the previous version altered.*