1 Identification

- Product identifier
- Trade name: 1,2-Dichloropropane
- Part number: RHH-037
- CAS Number: 78-87-5
- EC number: 201-152-2
- Index number: 602-020-00-0

- 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 Australia Pty Ltd
  679 Springvale Road
  Mulgrave
  Victoria 3170, Australia

- Further information obtainable from:
  Telephone: 1800 802 402
  e-mail: pdl-msds_author@agilent.com
- Emergency telephone number: CHEMTREC®: +(61) - 290372994

2 Hazard(s) Identification

- Classification of the substance or mixture

  - Flam. Liq. 2 H225 Highly flammable liquid and vapour.

- Label elements
- GHS label elements
  The substance is classified and labelled according to the Globally Harmonised System (GHS).
- Hazard pictograms

  - GHS02

- Signal word Danger
- Hazard statements
  Highly flammable liquid and vapour.
- Precautionary statements
  If medical advice is needed, have product container or label at hand.
  Keep out of reach of children.
  Read label before use.
  Keep away from heat/sparks/open flames/hot surfaces. No smoking.
  Keep container tightly closed.
  Ground/bond container and receiving equipment.

(Contd. on page 2)
Trade name: 1,2-Dichloropropane

Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
In case of fire: Use for extinction: CO2, powder or water spray.
Store in a well-ventilated place. Keep cool.
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 and Information on Ingredients

Chemical characterisation: Substances
CAS No. Description
78-87-5 1,2-dichloropropane
Identification number(s)
EC number: 201-152-2
Index number: 602-020-00-0

4 First Aid Measures

Description of first aid measures
General information: Immediately remove any clothing soiled by the product.
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Immediately rinse with water.
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 Fire Fighting Measures

Extinguishing media
Suitable extinguishing agents:
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
For safety reasons unsuitable extinguishing agents: Water with full jet
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
  Wear protective equipment. Keep unprotected persons away.
- 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.
- 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 No special precautions are necessary if used correctly.
- Information about fire - and explosion protection:
  Keep ignition sources away - Do not smoke.
  Protect against electrostatic charges.
- Conditions for safe storage, including any incompatibilities
- Storage:
- Requirements to be met by storerooms and receptacles: Store in a cool location.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions:
  Keep container tightly sealed.
  Store in cool, dry conditions in well sealed receptacles.
- Specific end use(s) No further relevant information available.

8 Exposure controls and 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:

<table>
<thead>
<tr>
<th>78-87-5 1,2-dichloropropane</th>
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<tbody>
<tr>
<td>NES Short-term value: 508 mg/m³, 110 ppm</td>
</tr>
<tr>
<td>Long-term value: 347 mg/m³, 75 ppm</td>
</tr>
<tr>
<td>WES Short-term value: 508 mg/m³, 110 ppm</td>
</tr>
<tr>
<td>Long-term value: 347 mg/m³, 75 ppm</td>
</tr>
</tbody>
</table>

- Additional information: The lists valid during the making were used as basis.
- Exposure controls
- Personal protective equipment:
- General protective and hygienic measures:
  Immediately remove all soiled and contaminated clothing
  Wash hands before breaks and at the end of work.
Trade name: 1,2-Dichloropropane

- **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:**
  Tightly sealed goggles

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**9 Physical and Chemical Properties**

- **Information on basic physical and chemical properties**
  **General Information**
  **Appearance:**
  - Form: Fluid
  - Colour: Clear
  - Odour: Like chlorine
  - Odour threshold: Not determined.
  - pH-value: Not determined.

- **Change in condition**
  - Melting point/freezing point: -100 °C
  - Initial boiling point and boiling range: 95-96 °C

- **Flash point:** 15 °C

- **Flammability (solid, gas):** Not applicable.

- **Ignition temperature:** 555 °C

- **Decomposition temperature:** Not determined.

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

- **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
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**

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<tr>
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**78-87-5 1,2-dichloropropane**

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<tbody>
<tr>
<td>Oral</td>
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</tr>
<tr>
<td>Dermal</td>
<td>8,750 mg/kg (rabbit)</td>
</tr>
</tbody>
</table>

- **Primary irritant effect**: No irritant effect.
- **Skin corrosion/irritation**: No irritating effect.
- **Serious eye damage/irritation**: No irritating effect.
12 Ecological Information

- **Toxicity**
  - **Aquatic toxicity**: No further relevant information available.
  - **Persistence and degradability**: No further relevant information available.
  - **Behaviour in environmental systems**: No further relevant information available.
  - **Bioaccumulative potential**: No further relevant information available.
  - **Mobility in soil**: No further relevant information available.
  - **Additional ecological information**:
    - **General notes**: Water hazard class 3 (German Regulation) (Assessment by list): 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 together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packaging**:
  - **Recommendation**: Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**
  - ADG, IMDG, IATA: UN1279

- **UN proper shipping name**
  - ADG: 1279 1,2-DICHLOROPROPAINE
  - IMDG, IATA: 1,2-DICHLOROPROPAINE

- **Transport hazard class(es)**
  - ADG, IMDG, IATA
    - **Class**: 3 Flammable liquids.
    - **Label**: 3

- **Packing group**
  - ADG, IMDG, IATA: II
### 15 Regulatory Information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **Australian Inventory of Chemical Substances**
    - Substance is listed.
  - **Standard for the Uniform Scheduling of Medicines and Poisons**
    - S6
  - **Directive 2012/18/EU**
  - **Named dangerous substances - ANNEX I** Substance is not listed.
  - **Seveso category** P5c FLAMMABLE LIQUIDS
  - **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5,000 t
  - **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50,000 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

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### 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
- **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
- **Flam. Liq. 2**: Flammable liquids – Category 2