1 Identification

- Product identifier
- Trade name: 1,2,4,5-Tetrachlorobenzene
- Part number: RCP-029
- CAS Number: 95-94-3
- EC number: 202-466-2

2 Hazard(s) Identification

- Classification of the substance or mixture

  Acute Tox. 4 H302 Harmful if swallowed.
  Skin Irrit. 2 H315 Causes skin irritation.
  Eye Irrit. 2 H319 Causes serious eye irritation.
  STOT SE 3 H335 May cause respiratory irritation.

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

  GHS07

- Signal word Warning
- Hazard-determining components of labelling:
  1,2,4,5-tetrachlorobenzene
- Hazard statements
  Harmful if swallowed.
  Causes skin irritation.
  Causes serious eye irritation.
  May cause respiratory irritation.
Trade name: 1,2,4,5-Tetrachlorobenzene

**Precautionary statements**
- If medical advice is needed, have product container or label at hand.
- Keep out of reach of children.
- Read label before use.
- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Wash thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Wear protective gloves / eye protection / face protection.
- IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
- Rinse mouth.
- IF ON SKIN: Wash with plenty of water.
- Specific treatment (see on this label).
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If skin irritation occurs: Get medical advice/attention.
- If eye irritation persists: Get medical advice/attention.
- Take off contaminated clothing and wash before reuse.
- Store in a well-ventilated place. Keep container tightly closed.
- Store locked up.
- 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.

### Composition and Information on Ingredients

- **Chemical characterisation: Substances**
- **CAS No. Description**
  - 95-94-3 1,2,4,5-tetrachlorobenzene
- **Identification number(s)**
- **EC number:** 202-466-2

### 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:** 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. If symptoms persist, consult a doctor.
- **After swallowing:** Call for a doctor immediately.
- **Information for doctor:**
  - **Most important symptoms and effects, both acute and delayed** No further relevant information available.
5 Fire Fighting 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 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
  - No special measures required.
  - 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 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: 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:**
  Tightly sealed goggles

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**9 Physical and Chemical Properties**

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

· **General Information**

· **Appearance:**
  Form: Solid
  Colour: Not determined.
  Odour: Characteristic
  Odour threshold: Not determined.

· **pH-value:**
  Not applicable.

· **Change in condition**

  Melting point/freezing point: 138-140 °C
  Initial boiling point and boiling range: 240-246 °C

· **Flash point:**
  160 °C

· **Flammability (solid, gas):**
  Product is not flammable.
### 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**
  - **LD/LC50 values relevant for classification:**
    
    **ATE (Acute Toxicity Estimates)**
    
    | Route  | LD50/LC50 | Concentration |
    |--------|-----------|---------------|
    | Oral   | 1,500 mg/kg (rat) | 95-94-3 1,2,4,5-tetrachlorobenzene |

(Contd. on page 6)
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.
- **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** UN3077
- **UN proper shipping name**
  - **ADG** 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (1,2,4,5-tetrachlorobenzene)
  - **IMDG** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (1,2,4,5-tetrachlorobenzene), MARINE POLLUTANT
  - **IATA** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (1,2,4,5-tetrachlorobenzene)
Transport hazard class(es)
- ADG, IMDG, IATA

Class
Label
9 Miscellaneous dangerous substances and articles.

Packing group
- ADG, IMDG, IATA
- Packing group III

Environmental hazards:
- Marine pollutant: Symbol (fish and tree)
- Special marking (ADG): 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
Stowage Code SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9.

Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable.

Transport/Additional information:
- ADG
  - 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

- UN "Model Regulation": UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (1,2,4,5-TETRACHLOROBENZENE), 9, III

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Australian Inventory of Chemical Substances
  Substance is not listed.
### 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
  - 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
  - Skin Irrit. 2: Skin corrosion/irritation – Category 2
  - Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
  - STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
- * Data compared to the previous version altered.