1 Identification

- **Product identifier**
  - **Trade name:** Prochlorperazine (maleate)
  - **Synonym:** 2-chloro-10-[3-(4-methyl-1-piperazinyl)propyl]-10H-phenothiazine, dimaleate
  - **Article number:** 20742
  - **CAS Number:** 84-02-6
  - **EC number:** 201-511-3
- **Application of the substance / the mixture** For research use only, not for human or veterinary use.
- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:** Cayman Chemical Co.
    1180 E. Ellsworth Rd.
    Ann Arbor, MI 48108
    USA
  - **Information department:** Product safety department
  - **Emergency telephone number:**
    During normal opening times: +1 (734) 971-3335
    US/CANADA: 800-424-9300
    Outside US/CANADA: 703-741-5970

2 Hazard(s) identification

- **Classification of the substance or mixture**
  - GHS07
  - 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**
  - **GHS label elements**
    The substance is classified and labeled according to the Globally Harmonized System (GHS).
  - **Hazard pictograms**
  - GHS07

- **Signal word** Warning

- **Hazard statements**
  - H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.

- **Precautionary statements**
  - Avoid breathing dust/fume/gas/mist/vapors/spray
  - Wash thoroughly after handling.

(Contd. on page 2)
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves / protective clothing.
If swallowed: Call a poison center/doctor if you feel unwell.
If on skin: Wash with plenty of water.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Specific treatment (see on this label).
Rinse mouth.
Take off contaminated clothing and wash it before reuse.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:
- NFPA ratings (scale 0 - 4)
  - Health = 3
  - Fire = 0
  - Reactivity = 0
- HMIS-ratings (scale 0 - 4)
  - HEALTH Health = 2
  - FIRE Fire = 0
  - REACTIVITY Reactivity = 0

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

3 Composition/information on ingredients
- Chemical characterization: Substances
- CAS No. Description
  - 84-02-6 Prochlorperazine (maleate)
- Identification number(s)
  - EC number: 201-511-3

4 First-aid measures
- Description of first aid measures
- General information:
  - 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:
  - Generally the product does not irritate the skin.
- After eye contact:
  - Rinse opened eye for several minutes under running water.
- After swallowing:
  - Immediately call a doctor.
- Information for doctor:
  - Most important symptoms and effects, both acute and delayed
    - May cause anemia, cough, CNS depression, drowsiness, headache, heart damage, lassitude (weakness, exhaustion), liver damage, narcosis, reproductive effects, teratogenic effects.
    - No further relevant information available.
Trade name: Prochlorperazine (maleate)

- Indication of any immediate medical attention and special treatment needed
  No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents:
  Use fire fighting measures that suit the environment.
  A solid water stream may be inefficient.
- 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 to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up: 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.
- Protective Action Criteria for Chemicals
  - PAC-1: Substance is not listed.
  - PAC-2: Substance is not listed.
  - PAC-3: Substance is not listed.

7 Handling and storage

- Handling:
  - Precautions for safe handling
    Thorough dedusting.
    Ensure good ventilation/exhaustion at the workplace.
  - Information about protection against explosions and fires: No special measures required.
- Conditions for safe storage, including any incompatibilities
  Keep container tightly closed.
  Store in accordance with information listed on the product insert.
- 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: Not required.
- Additional information: The lists that were valid during the creation were used as basis.
· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
  Wash hands before breaks and at the end of work.
  Avoid contact with the eyes and skin.
· **Breathing equipment:**
  In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
· **Protection of hands:**

  Protective gloves

  The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves**
  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**
  The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:** Not required.

### 9 Physical and chemical properties

| · **Information on basic physical and chemical properties** |
| · **General Information** |
| · **Appearance:** |
| Form: Crystalline |
| Color: Not determined. |
| Odor: Characteristic |
| · **Structural Formula** |
| C20H24ClN3S • 2C4H4O4 |
| · **Molecular Weight** |
| 606.1 g/mol |
| · **Odor threshold:** |
| Not determined. |
| · **pH-value:** |
| Not applicable. |
| · **Change in condition** |
| Melting point/Melting range: Undetermined. |
| Boiling point/Boiling range: Undetermined. |
| · **Flash point:** |
| Not applicable. |
| · **Flammability (solid, gaseous):** |
| Product is not flammable. |
| · **Decomposition temperature:** |
| Not determined. |
| · **Auto igniting:** |
| Not determined. |
| · **Danger of explosion:** |
| Product does not present an explosion hazard. |
## 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**: strong oxidizing agents
  - **Hazardous decomposition products**: carbon oxides, hydrogen chloride, nitrogen oxides, sulfur oxides

## 11 Toxicological information

- **RTECS Number**: SO3150000
- **Information on toxicological effects**
  - **Acute toxicity**:  
    - **LD/LC50 values that are relevant for classification**:
      | Oral LD50 | Intraperitoneal LD50 | Subcutaneous LD50 |
      |-----------|----------------------|-------------------|
      | 750 mg/kg (rat) | 191 mg/kg (mouse) | 320 mg/kg (mouse) |
  - **Primary irritant effect**:
    - **on the skin**: No irritant effect.
    - **on the eye**: No irritating effect.
    - **Sensitization**: No sensitizing effects known.
  - **Additional toxicological information**:
    - **Carcinogenic categories**
      - **IARC (International Agency for Research on Cancer)** Substance is not listed.
      - **NTP (National Toxicology Program)** Substance is not listed.
12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.
  - 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 1 (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 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, IMDG, IATA: not regulated

- UN proper shipping name
  - DOT, IMDG, IATA: not regulated

- Transport hazard class(es)
  - DOT, ADN, IMDG, IATA
    - Class: not regulated

- Packing group
  - DOT, 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.
15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  No further relevant information available.
- Sara
- Section 355 (extremely hazardous substances): Substance is not listed.
- Section 313 (Specific toxic chemical listings): Substance is not listed.
- TSCA (Toxic Substances Control Act): Substance is not listed.
- Hazardous Air Pollutants: Substance is not listed.
- Proposition 65
  - Chemicals known to cause cancer: Substance is not listed.
  - Chemicals known to cause reproductive toxicity for females: Substance is not listed.
  - Chemicals known to cause reproductive toxicity for males: Substance is not listed.
  - Chemicals known to cause developmental toxicity: Substance is not listed.
- Carcinogenic categories
- EPA (Environmental Protection Agency): Substance is not listed.
- TLV (Threshold Limit Value established by ACGIH): Substance is not listed.
- NIOSH-Ca (National Institute for Occupational Safety and Health): Substance is not listed.
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing SDS: Environment protection department.
- Contact: -
- Date of preparation / last revision: 11/25/2020 / -
- Abbreviations and acronyms:
  - IMDG: International Maritime Code for Dangerous Goods
  - DOT: US Department of Transportation
  - IATA: International Air Transport Association
  - ACGIH: American Conference of Governmental Industrial Hygienists
  - EINECS: European Inventory of Existing Commercial 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
  - NIOSH: National Institute for Occupational Safety
  - OSHA: Occupational Safety & Health
  - TLV: Threshold Limit Value
  - PEL: Permissible Exposure Limit
  - REL: Recommended Exposure Limit
  - Acute Tox. 4: Acute toxicity – Category 4