1 Identification

- **Product identifier**
- **Trade name**: MCPP
- **Part number**: PST-1190, PST-1190-10MG
- **CAS Number**: 93-65-2
- **EC number**: 202-264-4
- **Index number**: 607-049-00-2

- **Application of the substance / the mixture** Reagents and Standards for Analytical Chemical Laboratory Use

- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier**: Agilent Technologies, Inc.
  5301 Stevens Creek Blvd.
  Santa Clara, CA  95051  USA

- **Information department**:
  Telephone: 800-227-9770
e-mail: pdl-msds_author@agilent.com

- **Emergency telephone number**: CHEMTREC®: 1-800-424-9300

2 Hazard identification

- **Classification of the substance or mixture**

  - **GHS06 Skull and crossbones**
    Acute Toxicity (Oral) - Category 3  H301  Toxic if swallowed.
    Acute Toxicity (Inhalation) - Category 3  H331  Toxic if inhaled.

  - **GHS08 Health hazard**
    Carcinogenicity – Category 2  H351  Suspected of causing cancer.

  - **GHS05 Corrosion**
    Skin Corrosion - Category 1A  H314  Causes severe skin burns and eye damage.

  - **GHS07**
    Acute Toxicity (Dermal) – Category 4  H312  Harmful in contact with skin.
    Eye Irritation - Category 2A  H319  Causes serious eye irritation.
    Specific Target Organ Toxicity - Single Exposure - Category 3  H335  May cause respiratory irritation.

- **Label elements**
  - **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).
Trade name: MCPP

- **Hazard pictograms**

```
GHS05  GHS06  GHS07  GHS08
```

- **Signal word** Danger

- **Hazard-determining components of labeling:**
  2-(4-chloro-2-methylphenoxy)propionic acid

- **Hazard statements**
  Toxic if swallowed or inhaled.
  Harmful in contact with skin.
  Causes severe skin burns and eye damage.
  Causes serious eye irritation.
  Suspected of causing cancer.
  May cause respiratory irritation.

- **Precautionary statements**
  If medical advice is needed, have product container or label at hand.
  Keep out of reach of children.
  Read label before use.
  Obtain special instructions before use.
  Do not handle until all safety precautions have been read and understood.
  Do not breathe 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/protective clothing/eye protection/face protection.
  If swallowed: Immediately call a poison center/doctor.
  IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
  IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
  IF INHALED: Remove person to fresh air and keep 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 exposed or concerned: Get medical advice/attention.
  Call a poison center/doctor if you feel unwell.
  Specific measures (see on this label).
  If eye irritation persists: Get medical advice/attention.
  Wash contaminated clothing 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.

- **Classification system:**
  - **NFPA ratings (scale 0 - 4)**

```
1  Health = 4
4  Fire = 1
0  Reactivity = 0
```
48.1.26

· HMIS-ratings (scale 0 - 4)

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>FIRE</th>
<th>REACTIVITY</th>
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<td>1</td>
<td>0</td>
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</tbody>
</table>

Health = 3
Fire = 1
Reactivity = 0

3 Composition/Information on ingredients

· Chemical characterization: Substances
· CAS No. Description
  93-65-2 2-(4-chloro-2-methylphenoxy)propionic acid
· Identification number(s)
  · EC number: 202-264-4
  · Index number: 607-049-00-2

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.
  Remove breathing apparatus only after contaminated clothing have been completely removed.
  In case of irregular breathing or respiratory arrest provide artificial respiration.
  · After inhalation:
    Supply fresh air or oxygen; call for doctor.
    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:
    Do not induce vomiting; immediately call for medical help.
    Drink copious amounts of water and provide fresh air. Immediately call a 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 Firefighting measures

· Extinguishing media
· Suitable extinguishing agents: Use fire fighting measures that suit the environment.
· Special hazards arising from the substance or mixture
  During heating or in case of fire poisonous gases are produced.
· Advice for firefighters
· Protective equipment: Mouth respiratory protective device.
6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
  Mount respiratory protective device.
  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:
  Use neutralizing agent.
  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.
  Open and handle receptacle with care.
- Information about protection against explosions and fires: Keep respiratory protective device available.
- 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 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:
  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.
  Avoid contact with the eyes and skin.
- Breathing equipment:
  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 11-13 mil thickness are recommended for normal use. The breakthrough time is 1 hr. For cleaning a spill where there is direct contact of the chemical, butyl rubber gloves are recommended 12-15 mil 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: Crystalline
    - Color: Colorless
  - Odor: Characteristic
  - Odor threshold: Not determined.
  - pH-value: Not applicable.

- **Change in condition**
  - Melting point/Melting range: 88-90 °C
  - Boiling point/Boiling range: 327 °C

- **Flash point:**
  100 °C

- **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.

- **Explosion limits:**
  - Lower: Not determined.
  - Upper: Not determined.

- **Vapor pressure:**
  Not applicable.

- **Density at 20 °C:**
  1.35 g/cm³

- **Relative density**
  Not determined.
48.1.26

- Vapor density: Not applicable.
- Evaporation rate: Not applicable.
- Solubility in / Miscibility with Water: Insoluble.
- Partition coefficient (n-octanol/water): Not determined.
- Viscosity:
  - Dynamic: Not applicable.
  - Kinematic: Not applicable.
- Solids content: 100.0 %
- Other information: No further relevant information available.

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 that are relevant for classification:
    | ATE (Acute Toxicity Estimate) | Oral | Dermal | Inhalative |
    |------------------------------|------|--------|-----------|
    | LD50                         | 650  | 900    | 0.5       |
    | LD50                         | 650  | 900    |           |
    | LC50/4 h                     | 650  | 900    |           |

93-65-2 2-(4-chloro-2-methylphenoxy)propionic acid

- Primary irritant effect:
  - on the skin: Strong caustic effect on skin and mucous membranes.
  - on the eye: Strong caustic effect. Irritating effect.
  - Sensitization: No sensitizing effects known.
- Additional toxicological information:
  Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.
Safety Data Sheet
according to HPR, Schedule 1

Trade name: MCPP

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 3 (Self-assessment): extremely hazardous for water
    Do not allow product to reach ground water, water course or sewage system, even in small quantities.
    Must not reach bodies of water or drainage ditch undiluted or unneutralized.
    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 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, TDG, IMDG, IATA: UN2811
- UN proper shipping name
  - DOT: Toxic solids, organic, n.o.s. (2-(4-chloro-2-methylphenoxy) propionic acid)
  - TDG: 2811 TOXIC SOLID, ORGANIC, N.O.S. (2-(4-chloro-2-methylphenoxy)propionic acid), ENVIRONMENTALLY HAZARDOUS
  - IMDG: TOXIC SOLID, ORGANIC, N.O.S. (2-(4-chloro-2-methylphenoxy)propionic acid), MARINE POLLUTANT
## IATA

<table>
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### DOT, IATA

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### Packing group

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<th>III</th>
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### Environmental hazards:

- Product contains environmentally hazardous substances: 2-(4-chloro-2-methylphenoxy)propionic acid
- Symbol (fish and tree)
- Symbol (fish and tree)

### Special precautions for user

- Warning: Toxic substances
- 60
- EMS Number: F-A,S-A
- Stowage Category: A

### Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

- Not applicable.

### Transport/Additional information:

#### DOT

- Quantity limitations:
  - On passenger aircraft/rail: 100 kg
  - On cargo aircraft only: 200 kg

#### TDG

- Expected 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
- Expected quantities (EQ):
  - Code: E1
  - Maximum net quantity per inner packaging: 30 g
  - Maximum net quantity per outer packaging: 1000 g
Trade name: MCPP

UN "Model Regulation": UN 2811 TOXIC SOLID, ORGANIC, N.O.S. (2-(4-CHLORO-2-METHYLPHENOXY)PROPIONIC ACID), 6.1, III, ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara
  - Section 355 (extremely hazardous substances): Substance is not listed.
  - Section 313 (Specific toxic chemical listings): Substance is listed.
- TSCA (Toxic Substances Control Act): Substance is listed.
- Canadian substance listings:
  - Canadian Domestic Substances List (DSL): Substance is listed.
  - Canadian Ingredient Disclosure list (limit 0.1%): Substance is not listed.
  - Canadian Ingredient Disclosure list (limit 1%): 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
- Date of the latest revision of the safety data sheet 03/24/2019 / 2
- Abbreviations and acronyms:
  - IMDG: International Maritime Code for Dangerous Goods
  - DOT: US Department of Transportation
  - IATA: International Air Transport Association
  - 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