SAFETY DATA SHEET

1. Identification

Product Name  p-Toluic acid
Cat No. : AC139060000; AC139060010; AC139060050; AC139060051; AC139061000; AC139062500
Synonyms 4-Methylbenzoic acid
Recommended Use Laboratory chemicals.
Uses advised against No Information available

2. Hazard(s) identification

Classification
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Acute oral toxicity</th>
<th>Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Corrosion/irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Serious Eye Damage/Eye Irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>Category 3</td>
</tr>
<tr>
<td>Target Organs - Respiratory system.</td>
<td></td>
</tr>
</tbody>
</table>

Label Elements

Signal Word
Warning

Hazard Statements
Harmful if swallowed
Causes skin irritation
Causes serious eye irritation
May cause respiratory irritation
Precautionary Statements
Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area

Inhalation
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician if you feel unwell

Skin
IF ON SKIN: Wash with plenty of soap and water
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse

Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention

Ingestion
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Storage
Store in a well-ventilated place. Keep container tightly closed
Store locked up

Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
None identified

3. Composition / information on ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>p-Toluic acid</td>
<td>99-94-5</td>
<td>98</td>
</tr>
</tbody>
</table>

4. First-aid measures

Eye Contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

Skin Contact
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Obtain medical attention.

Inhalation
Remove from exposure, lie down. Move to fresh air. If not breathing, give artificial respiration. Obtain medical attention.

Ingestion
Clean mouth with water. Get medical attention.

Most important symptoms/effects
No information available.

Notes to Physician
Treat symptomatically
5. Fire-fighting measures

Suitable Extinguishing Media
- Water spray
- Carbon dioxide (CO₂)
- Dry chemical
- Chemical foam

Unsuitable Extinguishing Media
- No information available

Flash Point
- No information available

Method -
- No information available

Autoignition Temperature
- 570 °C / 1058 °F

Explosion Limits
- No data available

Flash Point
- No data available

Sensitivity to Mechanical Impact
- No information available

Sensitivity to Static Discharge
- No information available

Specific Hazards Arising from the Chemical
- Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products
- Carbon monoxide (CO)
- Carbon dioxide (CO₂)

Protective Equipment and Precautions for Firefighters
- As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA
- Health: 2
- Flammability: 0
- Instability: 0
- Physical hazards: N/A

6. Accidental release measures

Personal Precautions
- Ensure adequate ventilation. Use personal protective equipment.

Environmental Precautions
- See Section 12 for additional ecological information.

Methods for Containment and Clean Up
- Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal. Do not let this chemical enter the environment.

7. Handling and storage

Handling
- Avoid contact with skin and eyes. Do not breathe dust. Do not ingest.

Storage
- Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

8. Exposure controls / personal protection

Exposure Guidelines
- This product does not contain any known or suspected reproductive hazards

Engineering Measures
- Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment
- Eye/face Protection
  - Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA’s eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

- Skin and body protection
  - Wear appropriate protective gloves and clothing to prevent skin exposure.

- Respiratory Protection
  - No protective equipment is needed under normal use conditions.
9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Powder Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Light yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>No information available</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>No information available</td>
</tr>
<tr>
<td>Melting Point/Range</td>
<td>179 - 182 °C / 354.2 - 359.6 °F</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>274 - 275 °C / 525.2 - 527 °F @ 760 mmHg</td>
</tr>
<tr>
<td>Flash Point</td>
<td>No information available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability (solid,gas)</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability or explosive limits</td>
<td>No data available</td>
</tr>
<tr>
<td></td>
<td>Upper</td>
</tr>
<tr>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td></td>
<td>Lower</td>
</tr>
<tr>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>No information available</td>
</tr>
<tr>
<td>Solubility</td>
<td>11.6 g/l (98°C)</td>
</tr>
<tr>
<td>Partition coefficient; n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>570 °C / 1058 °F</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Molecular Formula</td>
<td>C8 H8 O2</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>136.15</td>
</tr>
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10. Stability and reactivity

<table>
<thead>
<tr>
<th>Reactive Hazard</th>
<th>None known, based on information available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability</td>
<td>Stable under normal conditions.</td>
</tr>
<tr>
<td>Conditions to Avoid</td>
<td>Avoid dust formation. Incompatible products.</td>
</tr>
<tr>
<td>Incompatible Materials</td>
<td>Strong oxidizing agents, Strong bases</td>
</tr>
<tr>
<td>Hazardous Decomposition Products</td>
<td>Carbon monoxide (CO), Carbon dioxide (CO₂)</td>
</tr>
<tr>
<td>Hazardous Polymerization</td>
<td>Hazardous polymerization does not occur.</td>
</tr>
<tr>
<td>Hazardous Reactions</td>
<td>None under normal processing.</td>
</tr>
</tbody>
</table>

11. Toxicological information

Acute Toxicity

Product Information
Component Information
Toxicologically Synergistic Products
Toxicologically Synergistic Products
No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation
No information available

Sensitization
No information available

Carcinogenicity
The table below indicates whether each agency has listed any ingredient as a carcinogen.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>IARC</th>
<th>NTP</th>
<th>ACGIH</th>
<th>OSHA</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>p-Toluic acid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
p-Toluic acid

<table>
<thead>
<tr>
<th>Component</th>
<th>TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>ELINCS</th>
<th>NLP</th>
<th>PICCS</th>
<th>ENCS</th>
<th>AICS</th>
<th>IECSC</th>
<th>KECL</th>
</tr>
</thead>
<tbody>
<tr>
<td>p-Toluic acid</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>202-803-3</td>
<td>-</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Legend:
- X - Listed
- E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
- F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- P - Indicates a commenced PMN substance
- R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S - Indicates a substance that is identified in a proposed or final Significant New Use Rule
- T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.
- XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).
- Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
- Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants.

<table>
<thead>
<tr>
<th>p-Toluic acid</th>
<th>99-94-5</th>
<th>Not listed</th>
<th>Not listed</th>
<th>Not listed</th>
<th>Not listed</th>
<th>Not listed</th>
</tr>
</thead>
</table>

Mutagenic Effects
- Not mutagenic in AMES Test

Reproductive Effects
- No information available.

Developmental Effects
- No information available.

Teratogenicity
- No information available.

STOT - single exposure
- Respiratory system

STOT - repeated exposure
- None known

Aspiration hazard
- No information available

Symptoms / effects, both acute and delayed
- No information available

Endocrine Disruptor Information
- No information available

Other Adverse Effects
- The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity
- Do not empty into drains.

Persistence and Degradability
- Soluble in water
- Persistence is unlikely based on information available.
- No information available.

Bioaccumulation/ Accumulation
- No information available.

Mobility
- Will likely be mobile in the environment due to its water solubility.

13. Disposal considerations

Waste Disposal Methods
- Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT
- Not regulated

TDG
- Not regulated

IATA
- Not regulated

IMDG/IMO
- Not regulated

15. Regulatory information

International Inventories

- p-Toluic acid
  - TSCA: X
  - DSL: X
  - NDSL: -
  - EINECS: 202-803-3
  - ELINCS: -
  - NLP: X
  - PICCS: X
  - ENCS: X
  - AICS: X
  - IECSC: X
  - KECL: X
that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313 Not applicable

SARA 311/312 Hazard Categories

- Acute Health Hazard Yes
- Chronic Health Hazard No
- Fire Hazard No
- Sudden Release of Pressure Hazard No
- Reactive Hazard No

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA Occupational Safety and Health Administration Not applicable

CERCLA Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations Not applicable

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security
This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Canada
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class D1B Toxic materials
D2B Toxic materials

16. Other information

Prepared By Regulatory Affairs
Thermo Fisher Scientific
### p-Toluic acid

<table>
<thead>
<tr>
<th>Creation Date</th>
<th>29-Oct-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision Date</td>
<td>25-May-2016</td>
</tr>
<tr>
<td>Print Date</td>
<td>25-May-2016</td>
</tr>
<tr>
<td>Revision Summary</td>
<td>This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)</td>
</tr>
</tbody>
</table>

**Disclaimer**

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End of SDS