Section 1 - Product and Company Information

Product Name: 4-METHYLBENZALDEHYDE, 97%
Product Number: T35602
Brand: Aldrich Chemical
Company: Sigma-Aldrich
Street Address: 3050 Spruce Street
City, State, Zip, Country: SAINT LOUIS, MO 63103 US
Technical Phone: 314 771 5765
Emergency Phone: 414 273 3850 Ext. 5996
Fax: 800 325 5052

Section 2 - Composition/Information on Ingredient

Substance Name: 4-METHYLBENZALDEHYDE
CAS # 144-97-0
SARA 313: No

Formula: C8H8O
Synonyms: p-Formyltoluene, p-Methylbenzaldehyde, 4-Methylbenzaldehyde, p-Toluinaldehyde (8CI), 4-Toluinaldehyde

Section 3 - Hazards Identification

Emergency Overview
Harmful. Harmful if swallowed. Irritating to eyes, respiratory system, and skin. Combustible liquid.

HMIS Rating
Health: 1
Flammability: 2
Reactivity: 0

NFPA Rating
Health: 1
Flammability: 2
Reactivity: 0

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

Ocular Exposure: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Call a physician.

Inhalation Exposure: In case of inhalation, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

Dermal Exposure: In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

Section 5 - Fire Fighting Measures

Flash Point: 162 °F
Autoignition Temp: 72 °C

Extinguishing Media
Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

Firefighting Equipment
- Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
- Specific Hazard(s): Combustible liquid. Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

Procedure to be Followed in Case of Leak or Spill
Evacuate area.

Procedure(s) of Personal Precaution(s)
Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

Methods for Cleaning Up
Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

Handling
User Exposure: Do not breathe vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage
Suitable: Keep tightly closed. Keep away from heat, sparks, and open flame. Store in a cool dry place.

Special Requirements
Store under inert gas.

Section 8 - Exposure Controls / PPE

Engineering Controls
Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment
- Respiratory: Government approved respirator.
- Hand: Chemical-resistant gloves.
- Eye: Chemical safety goggles.
Section 9 - Physical/Chemical Properties

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<th>Value</th>
<th>At Temperature or Pressure</th>
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<td>Molecular Weight</td>
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<td>Property</td>
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Section 10 - Stability and Reactivity

Stability
- Stable
- Stable

Materials to Avoid
- Strong bases, Strong oxidizing agents, Strong reducing agents

Hazardous Decomposition Products
- Carbon monoxide, Carbon dioxide

Section 11 - Toxicological Information

Route of Exposure
- Skin Contact
  - Causes skin irritation.
- Skin Absorption
  - May be harmful if absorbed through the skin.
- Eye Contact
  - Causes eye irritation.
- Inhalation
  - Material is irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

Toxicity Data
- Oral - Rat: 1,600 mg/kg (LD50)
  - Remarks: Behavioral/Somnolence (general depressed activity).
- Intraperitoneal - Rat: 400 mg/kg (LD50)
  - Remarks: Behavioral/Somnolence (general depressed activity).

Irritation Data
- Skin - Rabbit: 500 mg
  - Remarks: Moderate irritation effect
- Eyes - Rabbit: 100 mg
  - Remarks: Moderate irritation effect

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation
- Contact a licensed professional waste disposal service to dispose of this material.
  - This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber.
  - Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT
- Proper Shipping Name: Combustible liquid, n.o.s.
- UN#: 1993
- Class: COMBUSTIBLE LIQUID
- Packing Group: Packing Group III
- Hazard Label: None.
- PI#: Not PI
Section 15 - Regulatory Information

EU Additional Classification
Symbol of Danger: Xn
Indication of Danger
Harmful.
Risk Statements  R: 22 36/37/38
Harmful if swallowed. Irritating to eyes, respiratory system, and skin.
Safety Statements  S: 26 39
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

US Classification and Label Text
Indication of Danger
Harmful.
Risk Statements
Harmful if swallowed. Irritating to eyes, respiratory system, and skin.
Safety Statements
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

United States Regulatory Information
SARA Listed: No

TSCA Inventory Item: Yes

Canada Regulatory Information  
WHMIS Classification
This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.
DSL: Yes
NDSL: No

Section 16 - Other Information

Disclaimer
For R&D use only. Not for drug, household or other uses.

Warranty
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Sigma-Aldrich Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2004 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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