Section 1 - Product and Company Information

Product Name: 4-METHOXYPHENOL, 99%
Product Number: M18655
Brand: ALDRICH
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

<table>
<thead>
<tr>
<th>Substance Name</th>
<th>CAS #</th>
<th>SARA 313</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-METHOXYPHENOL</td>
<td>150-76-5</td>
<td>No</td>
</tr>
</tbody>
</table>

Formula: C7H8O2
Synonyms: P-Guaiacol * Hydroquinone monomethyl ether *
Hydroxyanisole * p-Hydroxyanisole *
4-Hydroxyanisole * p-Hydroxymethoxybenzene *
Leucobasal * Leucodine B * Mechinolum * Mequinol *
* p-Methoxyphenol * 4-Methoxyphenol (ACGIH) *
Mono methyl ether hydroquinone *
Novo-Dermoquinona * PMF (antioxidant) * USAF AN-7
RTECS Number: SL7700000

Section 3 - Hazards Identification

EMERGENCY OVERVIEW
Harmful.
Harmful if swallowed. May cause sensitization by skin contact.
Irritating to eyes.

HMIS RATING
HEALTH: 1
FLAMMABILITY: 0
REACTIVITY: 0

NFPA RATING
HEALTH: 1
FLAMMABILITY: 0
REACTIVITY: 0

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

Section 4 - First Aid Measures

ORAL EXPOSURE
If swallowed, wash out mouth with water provided person is conscious. Call a physician.
INHALATION EXPOSURE
If inhaled, 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.

EYE EXPOSURE
In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

FLASH POINT
269.6 °F   132 °C   Method: closed cup

AUTOIGNITION TEMP
421 °C

FLAMMABILITY
N/A

EXTINGUISHING MEDIA
Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

FIREFIGHTING
Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): 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
Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

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

STORAGE
Suitable: Keep tightly closed.

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS
Safety shower and eye bath. Mechanical exhaust required.
PERSONAL PROTECTIVE EQUIPMENT
Respiratory: Government approved respirator.
Hand: Compatible chemical-resistant gloves.
Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES
Wash thoroughly after handling.

EXPOSURE LIMITS, RTECS
<table>
<thead>
<tr>
<th>Country</th>
<th>Source</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>ACGIH</td>
<td>TWA</td>
<td>5 MG/M3</td>
</tr>
<tr>
<td>New Zealand</td>
<td>OEL</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Remarks: check ACGIH TLV

USA       | NIOSH       | TWA     | 5 MG/M3 |

Section 9 - Physical/Chemical Properties

Appearance
- Physical State: Solid
- Color: White
- Form: Fine crystals

Property
- Molecular Weight: 124.14 AMU
- pH: N/A
- BP/BP Range: 243 °C, 760 mmHg
- MP/MP Range: 54 °C
- Freezing Point: N/A
- Vapor Pressure: N/A
- Vapor Density: 4.3 g/l
- Saturated Vapor Conc.: N/A
- Bulk Density: N/A
- Odor Threshold: N/A
- Volatile%: N/A
- VOC Content: N/A
- Water Content: N/A
- Solvent Content: N/A
- Evaporation Rate: N/A
- Viscosity: N/A
- Surface Tension: N/A
- Partition Coefficient: N/A
- Decomposition Temp.: N/A

Flash Point: 269.6 °F, 132 °C, Method: closed cup

Explosion Limits: N/A
Flammability: N/A
Autoignition Temp: 421 °C
Refractive Index: N/A
Optical Rotation: N/A
Miscellaneous Data: N/A
Solubility: N/A

N/A = not available

Section 10 - Stability and Reactivity

STABILITY
- Stable: Stable.
- Materials to Avoid: Bases, Acid chlorides, Acid anhydrides, Oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS
- Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.
HAZARDOUS POLYMERIZATION
Hazardous Polymerization: Will not occur

Section 11 - Toxicological Information

ROUTE OF EXPOSURE
Skin Contact: May cause skin irritation.
Skin Absorption: May be harmful if absorbed through the skin.
Eye Contact: Causes eye irritation.
Inhalation: Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.
Ingestion: Harmful if swallowed.

SENSITIZATION
Skin: May cause allergic skin reaction.

TARGET ORGAN(S) OR SYSTEM(S)
Damage to the eyes.

SIGNS AND SYMPTOMS OF EXPOSURE
Depending on the intensity and duration of exposure, effects may vary from mild irritation to severe destruction of tissue.
Prolonged contact can cause: Damage to the eyes. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

TOXICITY DATA
Oral
Rat
1600 mg/kg
LD50

Intraperitoneal
Mouse
250 MG/KG
LD50

IRRITATION DATA
Skin
Rabbit
6,000 mg
12D
I
Remarks: Mild irritation effect

CHRONIC EXPOSURE - MUTAGEN
Species: Human
Dose: 25 UMOL/L
Cell Type: lymphocyte
Mutation test: DNA inhibition

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. Dissolve or mix the material with a combustible solvent and burn 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: None
Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA
Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 - Regulatory Information

EU DIRECTIVES CLASSIFICATION
Symbol of Danger: Xn
Indication of Danger: Harmful.
R: 22 36 43
Risk Statements: Harmful if swallowed. Irritating to eyes. May cause sensitization by skin contact.
S: 24/25 26 37/39 46
Safety Statements: Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves and eye/face protection. If swallowed, seek medical advice immediately and show this container or label.

US CLASSIFICATION AND LABEL TEXT
Indication of Danger: Harmful.
Risk Statements: Harmful if swallowed. May cause sensitization by skin contact. Irritating to eyes.
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. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any
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