Section 1 - Product and Company Information

Product Name: GUAIACOL
Product Number: G5502
Brand: Sigma Chemical
Company: Sigma-Aldrich
Street Address: 3050 Spruce Street
City, State, Zip. Country: SAINT LOUIS, MO 63103 US
Technical Phone: 314 771 5700
Fax: 800 365 5052
Emergency Phone: 414 273 3850 Ext. 5996

Section 2 - Composition/Information on ingredient

Substance Name: GUAIACOL
CAS #: 90-55-1
SARA 313: No

Formula: C7H8O2
Synonyms: Guaiacol, Guaiacol, guaiacol, Guajakol (Czech), o-Hydroxyanisole, 2-Hydroxyanisole, 1-Hydroxy-2-methoxybenzene, o-Methoxyphenol, 2-Methoxyphenol, Methylcatechol, Pymgosulolic acid

Section 3 - Hazards Identification

Emergency Overview: Harmful. Harmful if swallowed. Irritating to eyes and skin. Readily absorbed through skin. Combustible.

HMIS Rating: Health: 2, Flammability: 2, Reactivity: 1
NFPA Rating: Health: 2, Flammability: 2, Reactivity: 1

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 contact, immediately wash skin with soap and copious amounts of water.

Eye Exposure: In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

Section 5 - Fire Fighting Measures

Flash Point: 179.6 °F
Autoignition Temp: 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. Combustible.

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s):
Wear respirator, chemical safety goggles, 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. Keep away from heat and open flame. Store in a cool dry place.

Special Requirements:
Store under inert gas. Air and light sensitive.

Section 6 - 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.
Section 9 - Physical/Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>At Temperature or Pressure</th>
</tr>
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<tbody>
<tr>
<td>Molecular Weight</td>
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<tr>
<td>pH</td>
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<td>760 mmHg</td>
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<tr>
<td>MP or MP Range</td>
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<td>Vapor Density</td>
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<tr>
<td>Odor Threshold</td>
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<tr>
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<tr>
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<tr>
<td>Solvent Content</td>
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<td>Method: closed cup</td>
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<td>Method: closed cup</td>
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<tr>
<td>Autoignition Temp</td>
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</table>

Solubility:
Other Solvents: MISCEBLE WITH ALCOHOL, CHLOROFORM, ETHER, OILS, GLACIAL ACETIC ACID, BENZENE, TOLUENE, SOLUBLE IN SODIUM HYDROXIDE, SOLUTIONS...

N/A = not available

Section 10 - Stability and Reactivity

Stability
Stable.

Conditions of Instability
May discolor on exposure to light. May discolor on exposure to air.

Materials to Avoid
Strong oxidizing agents, strong bases.

Hazardous Decomposition Products
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. Readily absorbed through skin.

Eye Contact
Causes eye irritation.

Inhalation
May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion
Harmful if swallowed.

Signs and Symptoms of Exposure
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

RTECS Number: SL7525000

Toxicity Data

Oral - Human: 43 mg/kg (LD50)
Remarks: Behavioral, General acute.

Oral - Rat: 520 mg/kg (LD50)
Remarks: Behavioral, General acute.

Oral - Mouse: 261 mg/kg (LD50)

Inhalation - Mouse: 7,570 mg/m³ (LC50)

Intravenous - Mouse: 170 mg/kg (LD50)

Skin - Rabbit: 4,600 mg/kg (LD50)

Irritation Data

Skin - Rabbit: 50 mg 24H
Remarks: Severe irritation effect.

Eyes - Rabbit: 5 mg
Remarks: Mild irritation effect.

Chronic Exposure - Mutagen

Species: Human
Dosage: 500 UMC/UL

Cell Type: lymphocyte
Mutation Test: Sister chromatid exchange

Histidine reversion (Ames)

Section 12 - Ecological Information

Acute Ecotoxicity Tests

Test Type: E250 Daphnia
Species: Daphnia magna

Time: Value:
49.0 h 25.9 mg/l
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 Directive Classification
Symbol of Danger: Xn
Indication of Danger
Harmful
Risk Statements
R: 22/36/37
Harmful if swallowed. Irritating to eyes and skin.
Safety Statements
S: 26
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

US Classification and Label Text
Indication of Danger
Harmful
Risk Statements
Harmful if swallowed. Irritating to eyes and skin.
Safety Statements
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
US Statements
Readily absorbed through skin. Combustible.

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
NDSSL: 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.