



SIGMA-ALDRICH

Material Safety Data Sheet

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Version 1.60

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 5765
Fax:	800 325 5052
Emergency Phone:	414 273 3850 Ext. 5996

Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313
GUAIACOL	90-05-1	No
Formula	C7H8O2	
Synonyms	Guajacol, Guaiacol, Guaiacol, Guajakol (Czech), o-Hydroxyanisole, 2-Hydroxyanisole, 1-Hydroxy-2-methoxybenzene, o-Methoxyphenol, 2-Methoxyphenol, Methylcatechol, Pyroguaiac acid	

Section 3 - Hazards Identification

Emergency Overview

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

HMS 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 82 °C

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 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.

Section 9 - Physical/Chemical Properties

Appearance	Color	Form
Physical State Solid	Colorless	Crystals

Molecular Weight: 124.14 AMU

Property	Value	At Temperature or Pressure
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pH	N/A	
BP/BP Range	205 °C	760 mmHg
MP/MP Range	26 °C	
Freezing Point	N/A	
Vapor Pressure	0.11 mmHg	25 °C
Vapor Density	4.27 g/l	
Saturated Vapor Conc.	N/A	
SG/Density	1.129 g/cm ³	
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	
Partition Coefficient	Log Kow: 1.32	
Decomposition Temp.	N/A	
Flash Point °F	179.6 °F	Method: closed cup
Flash Point °C	82 °C	Method: closed cup
Explosion Limits	N/A	

Flammability	N/A
Autoignition Temp	N/A
Refractive Index	1.543

Solubility
Other Solvents: MISCIBLE 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
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.

Hazardous Polymerization
Hazardous Polymerization
Will not occur.

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 (LDLO)

Remarks: Behavioral:Tremor.
Gastrointestinal:Other changes.

Oral - Rat: 520 mg/kg (LD50)

Remarks: Behavioral:General anesthetic.

Oral - Mouse: 621 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: 500 mg 24H

Remarks: Severe irritation effect

Eyes - Rabbit: 5 mg

Remarks: Mild irritation effect

Chronic Exposure - Mutagen

Species	Dose
Human	500 UMOL/L

Cell Type
lymphocyte

Mutation test
Sister chromatid exchange Histidine reversion (Ames)

Section 12 - Ecological Information

Acute Ecotoxicity Tests

Test Type

EC50 Daphnia

Species

Daphnia magna

Time:

48.0 h

Value:

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 Directives Classification

Symbol of Danger: Xn

Indication of Danger

Harmful.

Risk Statements R: 22 36/38

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

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.