

## SAFETY DATA SHEET

Preparation Date: 6/9/2017

Revision date 1/24/2019

Revision Number: G2

### 1. IDENTIFICATION

**Product identifier**

**Product code:** GU101  
**Product Name:** GUAIACOL, PURIFIED

**Other means of identification**

**Synonyms:** o-Methoxyphenol  
 1-Hydroxy-2-methoxybenzene  
 2-Hydroxyanisole  
 2-Methoxyphenol  
 Guaiacol  
 Methylcatechol  
 O-Methyl catechol  
 Phenol, 2-methoxy-  
 Phenol, o-methoxy-  
 Pyrocatechol methyl ether  
 Pyrocatechol monomethyl ether  
 Pyroguaiac acid  
 o-Guaiacol  
 o-Hydroxyanisole

**CAS #:** 90-05-1  
**RTECS #** SL7525000  
**CI#:** Not available

**Recommended use of the chemical and restrictions on use**

**Recommended use:** Antioxidant. Chemical intermediate.  
**Uses advised against** No information available

**Supplier:** Spectrum Chemical Mfg. Corp  
 14422 South San Pedro St.  
 Gardena, CA 90248  
 (310) 516-8000

**Order Online At:** <https://www.spectrumchemical.com>  
**Emergency telephone number** Chemtrec 1-800-424-9300  
**Contact Person:** Tom Tyner (USA - West Coast)  
**Contact Person:** Ibad Tirmiz (USA - East Coast)

### 2. HAZARDS IDENTIFICATION

**Classification**

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

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2

Serious eye damage/eye irritation	Category 2A
Flammable liquids	Category 4

**Label elements**

**Warning**

**Hazard statements**

Harmful if swallowed  
 Causes skin irritation  
 Causes serious eye irritation  
 Combustible liquid



**Hazards not otherwise classified (HNOC)**

Not Applicable

**Other hazards**

May be harmful in contact with skin

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking  
 Wear protective gloves  
 Wear eye/face protection

**Precautionary Statements - Response**

In case of fire: Use CO2, dry chemical, or foam to extinguish.  
 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.  
 IF ON SKIN: Wash with plenty of water  
 If skin irritation occurs: Get medical advice/attention  
 Take off contaminated clothing and wash it before reuse  
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
 Rinse mouth

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep cool

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS No	Weight-%
Guaiacol	90-05-1	100

**4. FIRST AID MEASURES**

**First aid measures**

**Product code:** GU101

**Product name:** GUAIACOL,  
PURIFIED

**Page**

**General Advice:** National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.

**Skin Contact:** Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention. If skin irritation persists, call a physician.

**Eye Contact:** Flush eyes with water for 15 minutes. Get medical attention. If symptoms persist, call a physician.

**Inhalation:** Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion:** Harmful if swallowed. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

**Most important symptoms and effects, both acute and delayed**

**Symptoms**

- Causes serious eye irritation
- Causes skin irritation
- Ingestion may cause nausea, vomiting, and diarrhea
- Muscle weakness
- Burning sensation in the mouth and stomach
- Respiratory paralysis or failure
- May affect the cardiovascular system
- May cause hypothermia
- May affect behavior/central nervous system (somnolence, tremor)
- Tetany
- Dyspnea (Difficulty breathing and shortness of breath)
- It may affect the brain
- May cause anorexia
- May affect the blood

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician:** Treat symptomatically.

**Protection of first-aiders**

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

**5. FIRE-FIGHTING MEASURES**

**Extinguishing Media**

**Suitable Extinguishing Media:** Dry chemical. Carbon dioxide (CO<sub>2</sub>). Water spray, mist, or foam.

**Unsuitable Extinguishing Media:** Do not use a solid (straight) water stream as it may scatter and spread fire.

**Specific hazards arising from the chemical**

**Hazardous combustion products** Carbon Monoxide, Carbon Dioxide.

**Specific hazards** Combustible material. May be ignited by heat, sparks or flames.

**Special Protective Actions for Firefighters**

<b>Specific Methods:</b>	No information available
<b>Special Protective Equipment for Firefighters:</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions:** Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Remove all sources of ignition. All equipment used when handling the product must be grounded. Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent entry into waterways, sewers, basements or confined areas.

### Methods and material for containment and cleaning up

**Methods for containment** Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth). In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

**Methods for cleaning up** Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Use only non-sparking tools. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from incompatible materials.

**Safe Handling Advice**

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Use only in well-ventilated areas. Do not breathe vapors or spray mist. Do not ingest. Keep away from heat and sources of ignition. When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Technical Measures/Storage Conditions:**

Air sensitive. Sensitive to light. Store in light-resistant containers. Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials. Store in a segregated and approved area.

**Incompatible Materials:**

- Strong bases
- Strong oxidizing agents
- Acid chlorides
- Acid anhydrides

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

## National occupational exposure limits

### United States

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Guaiacol	90-05-1	None	None	None	None

### Canada

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Guaiacol	90-05-1	None	None	None	None

### Australia and Mexico

Component	CAS No	Australia	Mexico
Guaiacol	90-05-1	None	None

## Appropriate engineering controls

### Engineering measures to reduce exposure:

Ensure adequate ventilation, especially in confined areas. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

## Individual protection measures, such as personal protective equipment

### Personal Protective Equipment

#### Eye protection:

Goggles

#### Skin and body protection:

Chemical resistant apron  
Gloves  
Long sleeved clothing

#### Respiratory protection:

Respiratory protection is not necessary for normal handling. Good room ventilation or use of local exhaust (fume hood) is sufficient. Use a vapor respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapor, inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.

#### Hygiene measures:

Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product

## 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Physical state:

Low melting point solid  
Liquid above 25 °C

#### Appearance:

No information available.

#### Color:

Light yellow. Yellow.

#### Odor:

Aromatic. Phenolic. Sweet.

#### Taste

No information available.

#### Formula

C7H8O2

#### Molecular/Formula weight (g/mole):

124.13 g/mol

#### Flammability (solid, gas)

Combustible

#### Flashpoint (°C/°F):

82°C/180°F

<b>Flash Point Tested according to:</b> Open cup	<b>Autoignition Temperature (°C/°F):</b> 750°C/1382°F	<b>Lower Explosion Limit (%):</b> No information available
<b>Upper Explosion Limit (%):</b> No information available	<b>Melting point/range(°C/°F):</b> 27-29 °C/80.6-84.2 °F	<b>Decomposition temperature(°C/°F):</b> No information available
<b>Boiling point/range(°C/°F):</b> 202-209 °C/395.6-408.2 °F	<b>Bulk density:</b> No information available	<b>Density (g/cm3):</b> No information available
<b>Specific gravity:</b> 1.129	<b>pH</b> No information available	<b>Vapor pressure @ 20°C (kPa):</b> 0.0137 @ 25 deg. C
<b>Evaporation rate:</b> No information available	<b>Vapor density:</b> 4.27	<b>VOC content (g/L):</b> No information available
<b>Odor threshold (ppm):</b> No information available	<b>Partition coefficient (n-octanol/water):</b> log Kow = 1.32	<b>Viscosity:</b> No information available
<b>Miscibility:</b> Miscible with alcohol Miscible with Chloroform Miscible with glacial Acetic Acid Miscible with Ether Miscible with oils	<b>Solubility:</b> Very slightly soluble in water Solubility in Water: 18,700 mg/l @25 deg. C Soluble in Carbon tetrachloride Slightly soluble in Petroleum Ether	

## 10. STABILITY AND REACTIVITY

### Reactivity

Reacts with strong bases  
Reactive with oxidizing agents

### Chemical stability

**Stability:** Stable under recommended storage conditions. Darkens with exposure to air and light.

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur

**Conditions to avoid:** Heat. Ignition sources. Incompatible materials. Exposure to air. Exposure to light.

**Incompatible Materials:** Strong bases  
Strong oxidizing agents  
Acid chlorides  
Acid anhydrides

**Hazardous decomposition products:** Carbon monoxide. Carbon dioxide.

### Other Information

**Corrosivity:** No information available

**Special Remarks on Corrosivity:** No information available

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

**Principal Routes of Exposure:**

Ingestion. Inhalation. Skin.

**Acute Toxicity****Component Information**

Guaiacol	
CAS No	90-05-1

**LD50/oral/rat** = 520 mg/kg Oral LD50 Rat**LD50/oral/mouse** = 621 mg/kg oral LD50 mouse**LD50/dermal/rabbit** = 4600 mg/kg Dermal LD50Rabbit**LD50/dermal/rat** = No information available**LC50/inhalation/rat** = No information available**LC50/inhalation/mouse** = 7570 mg/m<sup>3</sup> 2hr Inhalation LC50 Mouse**Other LD50 or LC50information** = 2 g/kg oral LD50 rabbit**Product Information****LD50/oral/rat =****Value - Acute Tox** = 520 mg/kg**LD50/oral/mouse =****Value - Acute Tox Oral** = 621 mg/kg**LD50/dermal/rabbit****Value - Acute Tox** = 4600 mg/kg**LD50/dermal/rat****VALUE - Acute Tox Dermal** = No information available**LC50/inhalation/rat****VALUE-Vapor** = No information available**VALUE-Gas** = No information available**VALUE-Dust/Mist** = No information available**LC50/Inhalation/mouse****VALUE-Vapor** = No information available**VALUE - Gas** = No information available**VALUE - Dust/Mist** = No information available**Symptoms****Skin Contact:**

Causes skin irritation. May be absorbed through the skin. May be harmful in contact with skin. Absorption into the skin may affect behavior/central nervous system (somnolence).

**Eye Contact:**

Causes serious eye irritation.

**Inhalation**

May cause irritation of respiratory tract. Can cause dyspnea (shortness of breath and difficulty breathing). May affect behavior/central nervous system (tetany). It may affect the brain.

**Ingestion**

Harmful if swallowed. Causes digestive (gastrointestinal) tract irritation. Ingestion may cause nausea, vomiting, diarrhea. Symptoms may include a burning sensation in the mouth, throat, and stomach. May affect behavior/central nervous

system (somnolence). May affect behavior/central nervous system (general anesthetic). May affect behavior/central nervous system (tremors, muscle twitching). May cause muscle weakness. May affect the blood. May affect respiration (shortness of breath). Advanced stages may result in cardiovascular collapse, unconsciouness, coma, and possible death to respiratory failure. It may cause reduction in body temperature.

**Aspiration hazard** No information available.

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

**Chronic Toxicity** Prolonged or repeated ingestion may affect metabolism (cause anorexia, weight loss).

**Sensitization:** No information available.

**Mutagenic Effects:** No information available

**Carcinogenic effects:** Not considered carcinogenic.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Guaiacol	90-05-1	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

*ACGIH (American Conference of Governmental Industrial Hygienists)*

*IARC (International Agency for Research on Cancer)*

*NTP (National Toxicology Program)*

*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*

**Reproductive toxicity** No data is available

**Reproductive Effects:** No information available

**Developmental Effects:** No information available

**Teratogenic Effects:** No information available

**Specific Target Organ Toxicity**

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Target Organs:** No information available.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Ecotoxicity effects:** Aquatic environment.

*Guaiacol - 90-05-1*

**Crustacea** EC50: =25.9mg/L (48h, Daphnia magna)

**Persistence and degradability:** No information available

**Bioaccumulative potential:** No information available.



**Mobility in soil** No information available  
**Other adverse effects** No information available.

### 13. DISPOSAL CONSIDERATIONS

#### Disposal Methods

**Waste from residues / unused products:**

Waste must be disposed of in accordance with Federal, State and Local regulation.

**Contaminated packaging:**

Empty containers should be taken for local recycling, recovery or waste disposal. Do not re-use empty containers  
Dispose of as unused product.

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Guaiacol	90-05-1	None	None	None	None

### 14. TRANSPORT INFORMATION

#### DOT

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class** No information available  
**Subsidiary Class** No information available  
**Packing group:** No information available  
**Emergency Response Guide Number** No information available  
**Marine Pollutant** No data available  
**DOT RQ (lbs):** No information available  
**Special Provisions** No Information available  
**Symbol(s):** No information available  
**Description:** No information available

#### TDG (Canada)

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class** No information available  
**Subsidiary Risk:** No information available  
**Packing Group:** No information available  
**Marine Pollutant** No Information available  
**Description:** No information available

#### ADR

**UN Number** Not regulated  
**Proper Shipping Name:** No information available  
**Transport hazard class(es)** No information available  
**Packing group** No information available  
**Subsidiary Risk:** No information available

#### IMDG

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class:** No information available  
**Subsidiary Risk:** No information available

**Packing Group:** No information available  
**Marine Pollutant** No information available

**RID**

**UN Number** Not Regulated  
**Proper Shipping Name:** No information available  
**Transport hazard class(es)** No information available  
**Subsidiary Risk:** No information available  
**Packing group** No information available

**ICAO (air)**

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class** No information available  
**Subsidiary Risk:** No information available  
**Packing Group:** No information available

**IATA**

**UN Number** Not Regulated  
**Proper Shipping Name:** No information available  
**Transport hazard class(es)** No information available  
**Subsidiary Risk:** No information available  
**Packing group** No information available  
**Precautionary Statements - Response** IF exposed or concerned  
**Special Provisions** No information available

**15. REGULATORY INFORMATION**

**International Inventories**

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia AICS	EINECS-No.
<i>Guaiacol</i>	90-05-1	PresentACTIVE	Present KE-23352	Present	Present (3)-567	Present	Present	Present 201-964-7

**U.S. Regulations**

*Guaiacol*

**FDA - Direct Food Additives** 21 CFR 172.515

**FDA - 21 CFR - Total Food Additives** 172.515

- List Sourced from EAFUS

**California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.**

**Chemicals Known to the State of California to Cause Cancer:**

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

**Chemicals Known to the State of California to Cause Reproductive Toxicity:**

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Component	CAS No	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
<i>Guaiacol</i>	90-05-1	Not Listed	Not Listed	Not Listed	Not Listed

**CERCLA/SARA**

Component	CAS No	CERCLA - Hazardous	Section 302 Extremely	Section 302 Extremely	Section 313 - Chemical Category	Section 313 - Reporting

		Substances and their Reportable Quantities	Hazardous Substances and TPQs	Hazardous Substances and RQs		de minimis
Guaiacol	90-05-1	None	None	None	None	None

## U.S. TSCA

Component	CAS No	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Guaiacol	90-05-1	Not Applicable	Not Applicable

## Canada

### WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information: The WHMIS 2015 classification of this product has not been validated or reviewed yet.

**Canada Hazardous Products Regulation** This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

## DSL/NDSL

Component	CAS No	Canada (DSL)	Canada (NDSL)
Guaiacol	90-05-1	Present	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances
Guaiacol	90-05-1	Not listed
Component	CAS No	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Guaiacol	90-05-1	Not listed

## EU Classification

### EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
Guaiacol	90-05-1	Acute toxicity - Oral - Acute Tox. 4: H302 Harmful if swallowed. (Minimum classification); Skin corrosion/irritation - Skin Irrit. 2: H315 Causes skin irritation.; Serious Eye Damage/Eye Irritation - Eye Irrit. 2: H319 Causes serious eye irritation.604-031-00-6

### EU - CLP (1272/2008)

#### R-phrase(s)

R22 - Harmful if swallowed

R36/38 - Irritating to eyes and skin

#### S -phrase(s)

S 2 - Keep out of the reach of children.

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

Component	CAS No	Classification	Concentration Limits:	Safety Phrases
Guaiacol	90-05-1	Xn; R22 Xi; R36/38	No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

**Indication of danger:**

Xn - Harmful

Xi - Irritant

Xn



Xi



**16. OTHER INFORMATION**

Preparation Date: 6/9/2017  
Revision date: 1/24/2019  
Prepared by: Sonia Owen

**Disclaimer:**

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

**End of Safety Data Sheet**