

## Material Safety Data Sheet.

### 1. IDENTIFICATION

**Product Identifier:** GUAIFENESIN

**Other Means of Identification:**

Chemical Name: Guaifenesin

Synonyms: 3-(2-methoxyphenoxy) propane-1,2-diol,  
Guaiacol glyceryl ether,  
Glycerol guaiacolate.

Chemical Formula: C<sub>10</sub>H<sub>14</sub>O<sub>4</sub>

Molecular weight: 198.22 g/mol

CAS Number: 93-14-1

**Recommended Use** Active Pharmaceutical Ingredient

**Restrictions on Use** Any other uses than listed above.

**Initial Supplier Identifier:** Gurvey & Berry Co. Inc.  
310 Judson Street, Unit #15  
Toronto, ON, Canada, M8Z 5T6  
Tel: (416) 259-5700 Fax: (416) 259-5417  
E-mail: [msds@gurveyberry.com](mailto:msds@gurveyberry.com)

**Emergency Telephone number:** Canutec +1 (613)-966-6666

### 2. HAZARD IDENTIFICATION

**GHS Classification in accordance with Hazardous Products Regulations (HPR) OR/2015-17)**

Acute Toxicity (oral) – Category 4

**GHS Label elements, including precautionary statements**

**Pictogram**



**Signal word**

Warning

**Hazard statement(s)**

H302

Harmful if swallowed.

**Precautionary statement(s)**

P264

Wash skin thoroughly after handling.

P270  
P301 + P312 + P330

Do not eat, drink, or smoke when using this product.  
IF SWALLOWED: Call a POISON  
CENTER/doctor if you feel unwell. Rinse mouth.  
Dispose of contents/ container to an approved waste  
disposal plant.

P501

**Hazards not otherwise classified (HNOC) or not covered by GHS - none**

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration	Common name / Synonyms	Other identifiers
Guaifenesin	93-14-1	ca. 100%	See section1	See section1

Notes:

### 4. FIRST-AID MEASURES

**First aid measures by route of exposure:**

<b>General:</b>	Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.
<b>After Inhalation:</b>	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
<b>After Skin Contact:</b>	Wash off with soap and plenty of water. Consult a physician.
<b>After Eye Contact:</b>	Flush eyes with running water while keeping the eyelids open. If irritation occurs get medical attention.
<b>After Ingestion:</b>	Never give anything by mouth to an unconscious person. Rinse mouth with water if conscious. If vomiting occurs, lean patient forward or place on the left side (head-down position, if possible) to maintain an open airway and prevent aspiration. Get medical attention.

**Most Important Symptoms and Effects, Acute and Delayed:**

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Skin Contact: Harmful if absorbed through skin. May cause skin irritation.

Eye Contact: May cause eye irritation.

Ingestion: Harmful if swallowed.

May cause nausea, vomiting, diarrhea. May affect behavior/central nervous system (drowsiness, dizziness, ataxia, headache, convulsions, altered sleep time), smooth muscles relaxant, respiratory depression, difficulty breathing, urinary system – hematuria.

Medical Conditions Aggravated  
By Exposure:

Pre-existing conditions of the Gastrointestinal and Nervous systems.

**Immediate Medical Attention and Special Treatment** Treat symptomatically. See section 2 for a full list of precautionary statements.

## 5. FIRE-FIGHTING MEASURES

<b>Suitable Extinguishing Media:</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Unsuitable Extinguishing Media:</b>	Do not use water jet.
<b>Special Hazards Arising from the Product:</b>	Carbon Dioxide and Carbon Monoxide are produced under fire conditions
<b>Special Protective Equipment and Precautions for Fire-Fighters:</b>	Wear appropriate protective gear and self-contained breathing apparatus for firefighting if necessary.
<b>Further information:</b>	N/A

## 6. ACCIDENTAL RELEASE MEASURES

### **Personal precautions, protective equipment, and emergency procedures:**

No action shall be taken involving any personal risk or without suitable training.

Communicate hazard.

Evacuate unprotected personnel to safe areas.

Wear personal protective equipment. (see section 8).

Remove all sources of ignition.

Ensure adequate ventilation. Avoid breathing dust.

Prevent further leak or spill if safe to do so.

Wash hands thoroughly with soap and water after handling this material.

### **Methods and materials for containment and cleaning up**

#### **Small spill.**

Wear Personal protective equipment (see section 8).

Prevent further spillage if safe to do so.  
Spilled product should be removed immediately to avoid formation of dust.  
Vacuum or gently moisten with water and collect into a sealable container for disposal.  
Flush spill area with plenty of water (low pressure) into approved sewer.  
Avoid formation of aerosols and dusts.  
Ensure sufficient ventilation.  
Dispose of containers in accordance with local, regional, and federal authority requirements.  
Wash contaminated clothing.

### **Large spill.**

Wear Personal protective equipment (see section 8).  
Prevent further spillage if safe to do so.  
Avoid generation of dusts. Ensure adequate ventilation. Avoid breathing dust.  
Shovel. Use designated, labeled, closed waste containers for disposal.  
Finish cleaning by spreading water on the contaminated surface and allowing to evacuate through the sanitary system.  
Dispose of containers in accordance with local, regional, and federal authority requirement.

### **Environmental precautions**

Do not let product enter untreated drains and ground.

### **Reference to other sections**

See section 1 for emergency contact.  
See section 8 for information on appropriate personal protective equipment.  
See section 13 for disposal.

## **7. HANDLING AND STORAGE**

### **Precautions for Safe Handling:**

- Always wear personal protective equipment (see section 8)
- Avoid contact with eyes, skin, and clothing.
- Avoid ingestion and inhalation.
- Avoid formation of dust.
- Use with adequate ventilation.

For precautionary statements see also section 2.2

- Wash hands thoroughly after handling.
- Don not eat in the area.

### **Conditions for Safe Storage:**

Keep container tightly closed in a dry and well-ventilated place. Store at 15-30 degrees Celsius.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

## Control Parameters

Chemical Name	ACGIH® TLV®		OSHA PEL	
	TWA	STEL	TWA	STEL
Guaifenesin	N/A	N/A	N/A	N/A

**Appropriate Engineering Controls** Eyewash station and safety shower required. Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.

### Personal Protection Measures (e.g. personal protective equipment):

#### Eye/face protection

Safety glasses with side-shields for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN (EU).

#### Skin and body protection

Full body protective clothing, boots, gloves. Handle with gloves compatible with this material. Gloves must be inspected prior to use.

#### Respiratory protection

If operations generate dust, fume, or mist, use local ventilation or other appropriate Engineering controls to keep exposure contaminants below the exposure limit. Be sure to use approved /certified respirator or dust mask, such as standard N95.

#### Control of environmental exposure

Do not let product enter drains or ground.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form:	Solid, powder
Color:	White. Off-white. Grayish White.
Molecular Weight:	198.22 g/mol
Odor:	No data available
Odor Threshold:	No data available
pH:	No data available
Melting Point/freezing point:	78.5 °C (173.3 °F)
Initial boiling point/boiling range:	No data available
Flash Point:	No data available
Evaporation Rate:	No data available
Flammability (solid; gas):	No data available
Upper flammability or explosive limits	No data available
Lower flammability or explosive limits	No data available
Vapor Pressure (mmHg):	No data available
Vapor Density (air=1):	No data available
Relative Density:	No data available

Solubility in Water: Soluble in hot water  
Partially soluble in cold water  
Solubility in water: 1g in 20 mL @25°C

Solubility in Other Agents: Freely soluble in Ethanol  
Soluble in Chloroform  
Soluble in Glycerol  
Soluble in Propylene glycol  
Soluble in N,N-dimethylformamide  
Moderately soluble in benzene

Partition coefficient (n-octanol/water expected) 1.39

Autoignition No data available  
Decomposition No data available  
Viscosity No data available  
Explosive properties No data available  
Oxidizing properties No data available  
Other information:

## 10. STABILITY AND REACTIVITY

**Reactivity:** No data available  
**Chemical stability:** Stable under recommended storage conditions.  
**Possibility of hazardous reactions:** No data available  
**Conditions to avoid:** Heat. Avoid dust formation. Incompatible materials.  
**Incompatible materials:** Oxidizing agents, reducing agents, acid chlorides, acid anhydrides, chloroformates.  
**Hazardous decomposition products:** Hazardous decomposition products formed under fire conditions - Carbon oxides.  
**Other decomposition products**  
**In the event of fire:** See section 5

## 11. TOXICOLOGICAL INFORMATION

### Likely Routes of Exposure

<b>Inhalation</b>	<b>Yes</b>
<b>Skin contact</b>	<b>Yes</b>
<b>Eye contact</b>	<b>Yes</b>
<b>Ingestion</b>	<b>Yes</b>

### Acute Toxicity LD<sub>50</sub>:

Oral LD<sub>50</sub>

RTECS # TY8400000

LD<sub>50</sub> Oral -- Rat -- 1,510 mg/kg

Remarks. Behavioral: Altered sleep time (including change in righting reflex).

Lungs, Thorax, or Respiration: Chronic pulmonary edema. Respiratory disorder  
Oral – mouse – 690mg/kg  
Oral – rabbit – 2553mg/kg

Inhalation LC50  
No data available

Dermal LD50  
No data available

<b>Skin corrosion/irritation:</b>	N/A
<b>Serious Eye Damage/irritation:</b>	N/A
<b>Respiratory and/or Skin</b>	N/A
<b>Sensitization:</b>	N/A
<b>Aspiration Toxicity:</b>	N/A
<b>STOT (Specific Target Organ Toxicity)</b>	
<b>Single Exposure:</b>	N/A
<b>STOT (Specific Target Organ Toxicity)</b>	
<b>Repeated Exposure:</b>	N/A

**Carcinogenicity:**  
**IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.

**ACGIH®**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by ACGIH.

**OSHA**

<b>Reproductive Toxicity:</b>	N/A
<b>Germ Cell Mutagenicity:</b>	N/A
<b>Interactive Effects</b>	N/A

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** No data available

**Persistence and degradability:** No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**Other adverse effects:** No data available

**Toxicity** No data available

### 13. DISPOSAL CONSIDERATIONS

**Wastes of Residues:** Waste must be disposed of in accordance with federal, provincial, and local regulations.

**Contaminated Packaging:** Dispose of as unused product. Empty containers should be taken for local recycling, recovery, or waste disposal

### 14. TRANSPORT INFORMATION

Not dangerous goods.

### 15. REGULATORY INFORMATION

CANADA

DSL/NDSL: CAS No. 93-14-1 is listed on the DSL.

### 16. OTHER INFORMATION

This information is based upon knowledge currently available. More detailed information on the physical and chemical properties can be requested from the supplier. To the best of our knowledge, the information contained herein is accurate and complete. However, this should not be construed to imply any warranty or guarantee. Gurvey & Berry Co. Inc. shall not be held liable for any damage resulting from handling or from contact with the above chemical.

Created On: December 5, 2005  
Last Revised: 20 November 2020  
Printed On: 28 April 2021

This document will only be updated as needed.

N/A = not available.

N/D = not determined.