

OTTO CHEMIE PVT LTD

201, 51-53 Maroo Bhavan, Kalbadevi, Mumbai – 400002, India. Tel : + 91 22 2207 0099 / 6638 2599

Email : info@ottokemi.com, Web : www.ottokemi.com

ISO 9001: 2015

MATERIAL SAFETY DATA SHEET

1. Identification

1.1 GHS Product identifier

Guaiacol, 99%
Code G 1465

2. Hazard identification

2.1 Classification of the substance or mixture

Acute toxicity - Oral, Category 4

Skin irritation, Category 2

Eye irritation, Category 2

2.2 GHS label elements, including precautionary statements

Pictogram(s)



Signal word

Hazard statement(s)

Warning

H302 Harmful if swallowed

H315 Causes skin irritation

H319 Causes serious eye irritation

Precautionary statement(s)

Prevention

P264 Wash ... thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

P301+P312 IF SWALLOWED: Call a POISON

CENTER/doctor/2026 if you feel unwell.

P330 Rinse mouth.

P302+P352 IF ON SKIN: Wash with plenty of water/...

P321 Specific treatment (see ... on this label).

P332+P313 If skin irritation occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

Storage

none

Disposal

P501 Dispose of contents/container to ...

2.3 Other hazards which do not result in classification

none

3. Composition/information on ingredients

3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
guaiacol	guaiacol	90-05-1	none	100%

4. First-aid measures

4.1 Description of necessary first-aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

Fresh air, rest. Refer for medical attention.

In case of skin contact

Remove contaminated clothes. Rinse and then wash skin with water and soap.

In case of eye contact

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

If swallowed

Give a slurry of activated charcoal in water to drink. Refer for medical attention . Do NOT induce vomiting.

4.2 Most important symptoms/effects, acute and delayed

SYMPTOMS: Symptoms of exposure to this compound include pigmentation, skin irritation and inflammation; dermatitis, nausea, vomiting, abdominal pain, headache, vertigo, dizziness, faintness, cyanosis, collapse, difficulty breathing, convulsions, erythema, vesiculation, blistering, ulceration, gangrene, kidney and liver damage; chronic lung disease, hypothermia and coma. Other symptoms include sensation of burning and itching; conjunctivitis with mild hyperemia, photophobia and discharge; and keratoconjunctivitis, involving loss of corneal epithelium, clouding of the cornea, long-lasting irritability, miosis and photophobia. This compound may also cause salivation, respiratory difficulties, thready pulse, loss of pupillary reflexes, keratitis and corneal abrasion.

ACUTE/CHRONIC HAZARDS: This compound is irritating to the skin and eyes.

SYMPTOMS: Symptoms of exposure to this compound may include irritation of the skin and eyes, muscular weakness, cardiovascular collapse and paralysis of the vasomotor centers. Ingestion produces burning in the mouth and throat, gastrointestinal distress, tremors and collapse. ACUTE/CHRONIC HAZARDS: This compound is an irritant and is easily absorbed through the skin. When heated to decomposition it emits toxic fumes.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

/SRP:/ Immediate first aid: Ensure that adequate decontamination has been carried out. If patient is not breathing, start artificial respiration, preferably with a demand valve resuscitator, bag-valve-mask device, or pocket mask, as trained. Perform CPR if necessary. Immediately flush contaminated eyes with gently flowing water. Do not induce vomiting. 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. Keep patient quiet and maintain normal body temperature. Obtain medical attention. /Poisons A and B/

5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

As with all fires, evacuate personnel to a safe area. Firefighters should use self-contained breathing equipment and protective clothing.

5.2 Specific hazards arising from the chemical

This chemical is combustible.

This chemical is combustible.

5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2 Environmental precautions

Personal protection: complete protective clothing, face shield and filter respirator for organic gases and vapours adapted to the airborne concentration of the substance. Do NOT let this chemical enter the environment. Collect leaking and spilled liquid in covered containers as far as possible.

6.3 Methods and materials for containment and cleaning up

Wear approved respiratory protection, chemically compatible gloves and protective clothing. Wipe up spillage or collect spillage using a high efficiency vacuum cleaner. Avoid breathing vapor or dust. Ventilate area and wash spill site. Place spillage in appropriately labelled container for disposal.

7. Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Provision to contain effluent from fire extinguishing. Separated from food and feedstuffs. Store in tight, light-resistant container as defined in the USP-NF. This material should be handled and stored per label instructions to ensure product integrity.

8. Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure limit values

no data available

Biological limit values

no data available

8.2 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Respiratory protection
Wear dust mask when handling large quantities.
Thermal hazards
no data available

9. Physical and chemical properties

Physical state	off-white crystals
Colour	Faintly yellowish, limpid, oily liquid or yellow crystals
Odour	Aromatic odor
Melting point/ freezing point	-111\u00b0C(lit.)
Boiling point or initial boiling point and boiling range	205\u00b0C(lit.)
Flammability	Combustible.
Lower and upper explosion limit / flammability limit	no data available
Flash point	82\u00b0C
Auto-ignition temperature	335\u00b0C
Decomposition temperature	no data available
pH	no data available
Kinematic viscosity	no data available
Solubility	In water:17 g/L (15 \u00b0C)
Partition coefficient n-octanol/water (log value)	log Kow = 1.32
Vapour pressure	0.11 mm Hg (25 \u00b0C)
Density and/or relative density	1.129g/mL at 25\u00b0C(lit.)
Relative vapour density	4.27 (vs air)
Particle characteristics	no data available

10. Stability and reactivity

10.1 Reactivity

no data available

10.2 Chemical stability

Darkens on exposure to air and light

10.3 Possibility of hazardous reactions

This material is combustible when exposed to heat or flame. Phenols, such as CREOSOTE, do not behave as organic alcohols, as one might guess from the presence of a hydroxyl (-OH) group in their structure. Instead, they react as weak organic acids. Phenols and cresols are much weaker acids than common carboxylic acids (phenol has pKa = 9.88). These materials are incompatible with strong reducing substances such as hydrides, nitrides, alkali metals, and sulfides. Flammable gas (H₂) is often generated, and the heat of the reaction may ignite the gas. Heat is also generated by the acid-base reaction between phenols and bases. Such heating may initiate polymerization of the organic compound. Phenols are sulfonated very readily (for example, by concentrated sulfuric acid at room temperature). The reactions generate heat. Phenols are also nitrated very rapidly, even by dilute nitric acid. This compound is incompatible with acacia, albumin, oxidizers and cupric, ferric, gold and silver salts.

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

no data available

10.6 Hazardous decomposition products

When heated to decomposition material emits acrid smoke and irritating fumes.

11. Toxicological information

Acute toxicity

Oral: LD50 Rat oral 725 mg/kg

Inhalation: no data available

Dermal: no data available

Skin corrosion/irritation

no data available

Serious eye damage/irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

STOT-single exposure

no data available

STOT-repeated exposure

no data available
Aspiration hazard
no data available

12. Ecological information

12.1 Toxicity

Toxicity to fish: no data available

Toxicity to daphnia and other aquatic invertebrates: EC50; Species: Daphnia magna (Water flea, age 12 hr); Conditions: freshwater, static, 18°C; Concentration: 25900 µg/L for 48 hr; Effect: intoxication, immobilization /formulation

Toxicity to algae: no data available

Toxicity to microorganisms: no data available

12.2 Persistence and degradability

AEROBIC: o-Methoxyphenol, present at 100 mg/L, reached 97% of its theoretical BOD in four weeks using an activated sludge inoculum at 30 mg/L in the Japanese MITI test(1).

12.3 Bioaccumulative potential

An estimated BCF of 3 was calculated in fish for o-methoxyphenol(SRC), using log Kow of 1.32(1) and a regression-derived equation(2). According to a classification scheme(3), this BCF suggests the potential for bioconcentration in aquatic organisms is low(SRC).

12.4 Mobility in soil

A log Koc of 1.60 for o-methoxyphenol, corresponding to a Koc of 40(SRC), was experimentally determined in a Brookston clay loam soil(1). A log Koc of 1.56(2), corresponding to a Koc of 36(SRC) has also been reported. According to a classification scheme(3), these Koc values suggest that o-methoxyphenol is expected to have very high mobility in soil. The pKa of o-methoxyphenol is 9.98(4), indicating that this compound will exist primarily in the undissociated form in the environment(SRC). The adsorption of the phenol occurs by hydrogen bonding to sites on soil surfaces; ortho-substitution generally results in decreased adsorption compared to para-substitution due to steric hindrance(1).

12.5 Other adverse effects

no data available

13. Disposal considerations

13.1 Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

14. Transport information

14.1 UN Number

ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.

14.2 UN Proper Shipping Name

ADR/RID: unknown

IMDG: unknown

IATA: unknown

14.3 Transport hazard class(es)

ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.

14.4 Packing group, if applicable

ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.

14.5 Environmental hazards

ADR/RID: no IMDG: no IATA: no

14.6 Special precautions for user

no data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

15. Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
guaiacol	guaiacol	90-05-1	none
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
China Catalog of Hazardous chemicals 2015			Not Listed.
New Zealand Inventory of Chemicals (NZIoC)			Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Listed.
Vietnam National Chemical Inventory			Not Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)			Listed.

Section 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

