

---

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product Name: 4,4'-Sulfonylbis[2-(2-propenyl)]phenol(TGSH)

CAS No.: 41481-66-7

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Laboratory chemicals, Synthesis of substances.

### 1.3 Details of the supplier of the safety data sheet

Brand: MuseChem

Company: Garbo bio Inc.

### 1.4 Emergency telephone number

Telephone: +1-862-686-3898

Fax: +1-323-978-5598

E-mail address: info@musechem.com

Revision date: 06/01/2020

---

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

#### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, oral(Category 4) H302

Skin corrosion/irritation (Category 2) H315

Serious eye damage/eye irritation(Category 2A ) H319

Specific target organ toxicity, single exposure;Respiratory system(Category 3) H335

### 2.2 GHS Label elements, including precautionary statements



Pictogram

Signal Word Warning

Hazard statement(s)

May form combustible dust concentrations in air.

Precautionary statement(s) none

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

#### Hazard statement(s)

H302 Harmful if swallowed

H315 Causes skin irritation

H319 Causes serious eye irritation

H335 May cause respiratory irritation

#### Precautionary statement(s)

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

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

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. May form explosible dust-air mixture if dispersed.

---

### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

#### **3.1 Substances**

Substance name: 4,4'-Sulfonylbis(2-allylphenol)

Formula : C<sub>18</sub>H<sub>18</sub>O<sub>4</sub>S

Molecular weight: 330.398 g/mol

CAS-No. : 41481-66-7

---

### **4. FIRST AID MEASURES**

#### **4.1 Description of first aid measures**

##### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

##### **If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

##### **In case of skin contact**

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

##### **In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

##### **If swallowed**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

---

### **5. FIRE-FIGHTING MEASURES**

#### **5.1 Extinguishing media**

Suitable extinguishing media: alcohol-resistant foam, dry chemical or carbon dioxide

Unsuitable extinguishing media: no data

#### **5.2 Special hazards arising from the substance or mixture**

In combustion toxic fumes may form.

#### **5.3 Advice for firefighters**

Wear self-contained breathing apparatus.

Wear protective clothing to prevent contact with skin and eyes.

---

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. Do not attempt to take action without suitable protective clothing.

For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains or river.

Alert the neighbourhood to the presence of fumes or gas.

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

Mix with sand or vermiculite. Sweep up and shovel. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

### 6.4 Reference to other sections

For disposal see section 13.

---

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Wash hands thoroughly after handling. Ensure there is sufficient ventilation of the area.

Normal measures for preventive fire protection. For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated area. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

---

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### Appropriate engineering controls

Change contaminated clothing. Wash hands after working with substance.

#### Personal Protective Equipment

##### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

##### Skin Protection

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.

**Respiratory protection**

Recommended Filter type: Filter type P1

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

Required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

**Control of environmental exposure**

Do not let product enter drains.

---

**9. PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

|  |                            |
|--|----------------------------|
| a) Appearance                                      | Form: Solid                |
|  | Color: Off-white to yellow |
| b) Odour   | No data available          |
| c) pH  | No data available          |
| d) Melting point                                   | 151~155 °C - dec           |
| e) Boiling point                                   | No data available          |
| f) Flash point                                     | No data available          |
| g) Evaporation rate                                | No data available          |
| h) Flammability (solid, gas)                       | No data available          |
| i) Upper/lower flammability<br>or explosive limits | No data available          |
| j) Vapour pressure                                 | No data available          |
| k) Vapour density                                  | No data available          |
| l) Relative density                                | No data available          |
| m) Water solubility                                | No data available          |
| n) Viscosity                                       | No data available          |

---

**10. STABILITY AND REACTIVITY****10.1 Reactivity**

No data available

**10.2 Chemical stability**

Stable under recommended storage conditions

**10.3 Possibility of hazardous reactions**

No data available

**10.4 Conditions to avoid**

No data available

**10.5 Incompatible materials**

Not data available

**10.6 Hazardous decomposition products**

In the event of fire: see section 5

---

**11. TOXICOLOGICAL INFORMATION****Acute toxicity**

Oral: No data available

Inhalation: No data available

Dermal: No data available

**Skin corrosion/irritation**

No data available

**Serious eye damage/eye irritation**

No data available

**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

IARC: No ingredient 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 ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**Reproductive toxicity** No data available

**Specific target organ toxicity - single exposure** No data available

**Specific target organ toxicity - repeated exposure** No data available

**Aspiration hazard** No data available

**Additional Information**

RTECS: Not available

---

**12. ECOLOGICAL INFORMATION****12.1 Toxicity**

No data available

**12.2 Persistence and degradability**

No data available

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

No data available

---

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

#### Product

Consult state, local or national regulations for proper disposal. Hand over to authorised disposal company as hazardous waste.

#### Packaging

Disposal must be made according to official regulations.

---

## 14. TRANSPORT INFORMATION

#### DOT (US)

Not dangerous goods

#### IMDG

Not dangerous goods

#### IATA

Not dangerous goods

---

## 15. REGULATORY INFORMATION

This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.

#### California Proposition 65

Not listed on California's listing of known or potential carcinogens.

#### U.S. Federal Regulations

SARA 313: Not applicable

SARA 302: Not applicable

SARA 311/312 Hazard Categories: See section 2 for more information

#### Safety Assessment

No Chemical Safety Assessment

---

## 16. OTHER INFORMATION

#### Further information

Copyright 2017 MuseChem License granted to make unlimited paper copies for internal use only.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. MuseChem and its Affiliates 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.