1,3,5-Trimethoxybenzene

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Description: 1,3,5-Trimethoxybenzene

Cat No. : A13981
Synonyms Phloroglucinol Trimethyl Ether; Sym-Trimethoxybenzene.
CAS No 621-23-8
Molecular Formula C9 H12 O3

Supplier
Avocado Research Chemicals Ltd.
(Part of Thermo Fisher Scientific)
Shore Road, Heysham
Lancashire, LA3 2XY,
United Kingdom
Office Tel: +44 (0) 1524 850506
Office Fax: +44 (0) 1524 850608

Emergency Telephone Number
For information US call: 001-800-227-6701 / Europe call: +32 14 57 52 11
Emergency Number US:001-201-796-7100 / Europe: +32 14 57 52 99
CHEMTREC Tel. No. US:001-800-424-9300 / Europe:001-703-527-3887

E-mail address begel.sdsdesk@thermofisher.com

Recommended Use Laboratory chemicals.
Uses advised against No Information available

SECTION 2. HAZARD IDENTIFICATION

Physical State Powder Solid
Appearance Off-white
Odor No information available

Emergency Overview Harmful if swallowed.

Classification of the substance or mixture

Acute Oral Toxicity Category 4

Label Elements

Signal Word Warning

Hazard Statements
H302 - Harmful if swallowed
Precautionary Statements

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

Response
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
P330 - Rinse mouth

Storage
P403 - Store in a well-ventilated place

Disposal
P501 - Dispose of contents/container to an approved waste disposal plant

Physical and Chemical Hazards
None identified.

Health Hazards
Harmful if swallowed.

Environmental hazards
Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants. Is not likely mobile in the environment due its low water solubility. Spillage unlikely to penetrate soil.

This product does not contain any known or suspected endocrine disruptors.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene, 1,3,5-trimethoxy-</td>
<td>621-23-8</td>
<td>&gt;95</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

General Advice
If symptoms persist, call a physician.

Eye Contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Skin Contact
Wash off immediately with plenty of water for at least 15 minutes. Get medical attention.

Inhalation
Remove to fresh air. Get medical attention. If not breathing, give artificial respiration.

Ingestion
Do NOT induce vomiting. Get medical attention.

Most important symptoms and effects
No information available.

Self-Protection of the First Aider
Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

Notes to Physician
Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers.
Extinguishing media which must not be used for safety reasons
No information available.

Specific Hazards Arising from the Chemical
Combustible material. Containers may explode when heated.

Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions
Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation. Remove all sources of ignition. Take precautionary measures against static discharges.

Environmental Precautions
Should not be released into the environment. See Section 12 for additional Ecological Information.

Methods for Containment and Clean Up
Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal. Remove all sources of ignition.

Refer to protective measures listed in Sections 8 and 13.

SECTION 7. HANDLING AND STORAGE

Handling
Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation. Keep away from open flames, hot surfaces and sources of ignition.

Storage
Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame.

Specific Use(s)
Use in laboratories

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Monitoring methods
BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust MDHS70 General methods for sampling airborne gases and vapours

Exposure Controls

Engineering Measures
Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source.

Personal protective equipment
Eye Protection
Goggles (European standard - EN 166)

Hand Protection
Protective gloves

<table>
<thead>
<tr>
<th>Glove material</th>
<th>Breakthrough time</th>
<th>Glove thickness</th>
<th>EU standard</th>
<th>Glove comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrile rubber</td>
<td>See manufacturers</td>
<td>-</td>
<td>EN 374</td>
<td>(minimum requirement)</td>
</tr>
<tr>
<td>Neoprene</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural rubber</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PVC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Inspect gloves before use.
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.
(Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatibility, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Skin and body protection
Long sleeved clothing

Respiratory Protection
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly

Large scale/emergency use
Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced
**Recommended Filter type:** Particulates filter conforming to EN 143

Small scale/Laboratory use
Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
**Recommended half mask:** Particle filtering: EN149:2001
When RPE is used a face piece Fit Test should be conducted

Hygiene Measures
Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls
No information available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Off-white</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Powder Solid</td>
</tr>
<tr>
<td>Odor</td>
<td>No information available</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No information available</td>
</tr>
<tr>
<td>Melting Point/Range</td>
<td>50 - 53 °C / 122 - 127.4 °F</td>
</tr>
<tr>
<td>Softening Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>255 °C / 491 °F</td>
</tr>
<tr>
<td>Flash Point</td>
<td>85 °C / 185 °F</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability (solid,gas)</td>
<td>No information available</td>
</tr>
<tr>
<td>Explosion Limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Specific Gravity / Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Slightly soluble</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available</td>
</tr>
</tbody>
</table>
**SECTION 10. STABILITY AND REACTIVITY**

**Stability**
Stable under recommended storage conditions.

**Hazardous Reactions**
None under normal processing.

**Hazardous Polymerization**
No information available.

**Conditions to Avoid**

**Materials to avoid**
Strong oxidizing agents.

**Hazardous Decomposition Products**
Carbon monoxide (CO). Carbon dioxide (CO₂).

**SECTION 11. TOXICOLOGICAL INFORMATION**

**Product Information**

**(a) acute toxicity:**

<table>
<thead>
<tr>
<th>Component</th>
<th>LD₅₀ Oral</th>
<th>LD₅₀ Dermal</th>
<th>LC₅₀ Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene, 1,3,5-trimethoxy-</td>
<td>1480 mg/kg (Mouse)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**(b) skin corrosion/irritation:**
No data available

**(c) serious eye damage/irritation:**
No data available

**(d) respiratory or skin sensitization:**
- **Respiratory**
  No data available
- **Skin**
  No data available

**(e) germ cell mutagenicity:**
No data available

**(f) carcinogenicity:**
No data available

There are no known carcinogenic chemicals in this product

**(g) reproductive toxicity:**
No data available

**(h) STOT-single exposure:**
No data available

**(i) STOT-repeated exposure:**
No data available

**Target Organs**
No information available.
(j) aspiration hazard; Not applicable
Solid
Other Adverse Effects The toxicological properties have not been fully investigated.
Symptoms / effects, both acute and delayed No information available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects Do not empty into drains. Do not flush into surface water or sanitary sewer system.

Persistence and Degradability Persistence Insoluble in water, May persist, based on information available.
Bioaccumulative Potential May have some potential to bioaccumulate

Mobility in soil Spillage unlikely to penetrate soil Is not likely mobile in the environment due its low water solubility

Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential This product does not contain any known or suspected endocrine disruptors This product does not contain any known or suspected substance This product does not contain any known or suspected substance

SECTION 13. DISPOSAL CONSIDERATIONS

Waste from Residues/Unused Products Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.
Contaminated Packaging Dispose of this container to hazardous or special waste collection point.
Other Information Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains.

SECTION 14. TRANSPORT INFORMATION

Road and Rail Transport Not Regulated
IMDG/IMO Not regulated
IATA Not regulated
Special Precautions for User No special precautions required

SECTION 15. REGULATORY INFORMATION

International Inventories
X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), Japan
Benzene, 1,3,5-trimethoxy-

**Component** | **The Inventory of Hazardous Chemicals (2015 Edition)** | **List of dangerous goods GB 12268 - 2012** | **TCSI** | **IECSC** | **EINECS** | **TSCA** | **DSL** | **PICCS** | **ENCS** | **ISHL** | **AICS** | **KECL**
---|---|---|---|---|---|---|---|---|---|---|---|---
Benzene, 1,3,5-trimethoxy- | - | - | X | - | 210-673-4 | X | X | X | X | X | X | -

### National Regulations

### SECTION 16. OTHER INFORMATION

**Prepared By** Health, Safety and Environmental Department

**Creation Date** 26-Sep-2005

**Revision Date** 22-Apr-2024

**Revision Summary** New emergency telephone response service provider.

**Training Advice**

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

### Legend

| CAS | Chemical Abstracts Service | TSCA | United States Toxic Substances Control Act Section 8(b) Inventory |
| EINECS/ELINCS | European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances | DSL/NDSL | Canadian Domestic Substances List/Non-Domestic Substances List |
| PICCS | Philippines Inventory of Chemicals and Chemical Substances | ENCS | Japanese Existing and New Chemical Substances |
| IECSC | Chinese Inventory of Existing Chemical Substances | AICS | Australian Inventory of Chemical Substances |
| KECL | Korean Existing and Evaluated Chemical Substances | NZIoC | New Zealand Inventory of Chemicals |

| WEL | Workplace Exposure Limit | TWA | Time Weighted Average |
| ACGIH | American Conference of Governmental Industrial Hygienists | IARC | International Agency for Research on Cancer |
| RPE | Respiratory Protective Equipment | PNEC | Predicted No Effect Concentration |
| LC50 | Lethal Concentration 50% | LD50 | Lethal Dose 50% |
| NOEC | No Observed Effect Concentration | EC50 | Effective Concentration 50% |
| PBT | Persistent, Bioaccumulative, Toxic | POW | Partition coefficient Octanol:Water |
| vPvB | very Persistent, very Bioaccumulative |

| ICAO/IATA | International Civil Aviation Organization/International Air Transport Association | IMO/MDG | International Maritime Organization/International Maritime Dangerous Goods Code |
| ADR | European Agreement Concerning the International Carriage of Dangerous Goods by Road | MARPOL | International Convention for the Prevention of Pollution from Ships |
| OECD | Organisation for Economic Co-operation and Development | ATE | Acute Toxicity Estimate |
| BCF | Bioconcentration factor | VOC | (Volatile Organic Compound) |

### Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS
End of Safety Data Sheet