# Thermo Fisher SCIENTIFIC

# SAFETY DATA SHEET

Page 1 / 8 Creation Date 11-Oct-2005 Revision Date 05-Apr-2024 Version 4

ACR13288

# 3,5-Dimethoxy-4-hydroxybenzaldehyde

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

产品说明: 3.5-二甲氧基-4-羟基苯甲醛

Product Description: 3,5-Dimethoxy-4-hydroxybenzaldehyde

 Cat No.:
 132880000; 132880050; 132880250; 132881000

 Synonyms
 4-Hydroxy-3,5-dimethoxybenzaldehyde; Syringaldehyde

CAS No 134-96-3 Molecular Formula C9 H10 O4

Supplier UK entity/business name

Fisher Scientific UK Bishop Meadow Road,

Loughborough, Leicestershire LE11 5RG, United Kingdom

**EU entity/business name** Thermo Fisher Scientific

Janssen Pharmaceuticalaan 3a, 2440 Geel, Belgium

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 StateAppearanceOdorPowder SolidBeigeOdorless

# **Emergency Overview**

Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. Air sensitive. May form combustible dust concentrations in air.

#### Classification of the substance or mixture

| Acute Oral Toxicity                                | Category 4 |
|--|------------|
| Skin Corrosion/Irritation                          | Category 2 |
| Serious Eye Damage/Eye Irritation                  | Category 2 |
| Specific target organ toxicity - (single exposure) | Category 3 |

## **Label Elements**



Page 2/8 Revision Date 05-Apr-2024

# 3,5-Dimethoxy-4-hydroxybenzaldehyde

\_\_\_\_\_

## Signal Word

#### Warning

#### **Hazard Statements**

H302 - Harmful if swallowed

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

#### **Precautionary Statements**

#### Prevention

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

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

P271 - Use only outdoors or in a well-ventilated area

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

#### Response

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

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

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

P312 - Call a POISON CENTER or doctor if you feel unwell

P330 - Rinse mouth

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

#### Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

#### Disposal

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

#### **Physical and Chemical Hazards**

Dust can form an explosive mixture with air.

## **Health Hazards**

Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

#### **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. The product is insoluble and sinks in water. The product evaporates slowly.

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

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

| Component                              | CAS No   | Weight % |  |  |
|--|----------|----------|--|--|
| Benzaldehyde, 4-hydroxy-3,5-dimethoxy- | 134-96-3 | >95      |  |  |

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

# **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 soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention.

#### Inhalation

Remove from exposure, lie down. Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

## Ingestion

Clean mouth with water. Get medical attention.

Page 3/8 Revision Date 05-Apr-2024

## 3,5-Dimethoxy-4-hydroxybenzaldehyde

## 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 (CO<sub>2</sub>). Dry chemical. Chemical foam.

## Extinguishing media which must not be used for safety reasons

No information available.

#### Specific Hazards Arising from the Chemical

Fine dust dispersed in air may ignite.

#### **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. Thermal decomposition can lead to release of irritating gases and vapors.

# **SECTION 6. ACCIDENTAL RELEASE MEASURES**

## **Personal Precautions**

Ensure adequate ventilation.

#### **Environmental Precautions**

See Section 12 for additional Ecological Information.

## Methods for Containment and Clean Up

Avoid dust formation. Sweep up and shovel into suitable containers for disposal.

Refer to protective measures listed in Sections 8 and 13.

## **SECTION 7. HANDLING AND STORAGE**

# Handling

Avoid contact with skin and eyes. Do not breathe dust.

#### Storage

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Store under an inert atmosphere.

#### Specific Use(s)

Use in laboratories

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# **Control Parameters**

# **Monitoring methods**

Page 4/8 Revision Date 05-Apr-2024

## 3,5-Dimethoxy-4-hydroxybenzaldehyde

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

| l PVC |
|-------|
|-------|

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 compatability, 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 Wear appropriate protective gloves and clothing to prevent skin exposure

**Respiratory Protection** No protective equipment is needed under normal use conditions.

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

Small scale/Laboratory use Maintain adequate ventilation

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

**Environmental exposure controls** No information available.

# **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

AppearanceBeigePhysical StatePowder Solid

**Odor** Odorless

Odor Threshold No data available

**pH** No information available

Melting Point/Range 110 - 113 °C / 230 - 235.4 °F

Softening Point No data available

**Boiling Point/Range** 192 - 193 °C / 377.6 - 379.4 °F @ 14 mmHg

Flash Point No information available Method - No information available

Evaporation Rate Not applicable Solid

Flammability (solid,gas)

Explosion Limits

No information available

No data available

Page 5/8 Revision Date 05-Apr-2024

## 3,5-Dimethoxy-4-hydroxybenzaldehyde

Vapor Pressure No data available

Vapor Density Not applicable Solid

Specific Gravity / Density 1.013
Bulk Density No data available

Water Solubility Insoluble

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Componentlog PowBenzaldehyde,1.575

4-hydroxy-3,5-dimethoxyAutoignition Temperature

Decomposition Temperature

No data available
No data available

Viscosity Not applicable

Explosive Properties No information available Oxidizing Properties No information available

Molecular FormulaC9 H10 O4Molecular Weight182.18

## **SECTION 10. STABILITY AND REACTIVITY**

Solid

**Stability** Air sensitive.

Hazardous ReactionsNo information available.Hazardous PolymerizationNo information available.

**Conditions to Avoid** Exposure to air. Incompatible products.

Materials to avoid Strong oxidizing agents. Strong bases. Strong reducing agents.

Hazardous Decomposition Products Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

## **SECTION 11. TOXICOLOGICAL INFORMATION**

**Product Information**No acute toxicity information is available for this product

(a) acute toxicity;

(b) skin corrosion/irritation; Category 2

(c) serious eye damage/irritation; Category 2

(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

Page 6/8 Revision Date 05-Apr-2024

3,5-Dimethoxy-4-hydroxybenzaldehyde

(h) STOT-single exposure; Category 3

Results / Target organs Respiratory system

No data available (i) STOT-repeated exposure;

**Target Organs** No information available.

Not applicable (j) aspiration hazard;

Solid

**Other Adverse Effects** The toxicological properties have not been fully investigated. See actual entry in RTECS for

complete information

Symptoms / effects,both acute and No information available

delayed

# **SECTION 12. ECOLOGICAL INFORMATION**

Do not empty into drains. **Ecotoxicity effects** 

Persistence and Degradability

**Persistence** May persist, based on information available.

**Bioaccumulative Potential** May have some potential to bioaccumulate

| Component                              | log Pow | Bioconcentration factor (BCF) |  |  |  |  |
|--|---------|-------------------------------|--|--|--|--|
| Benzaldehvde, 4-hvdroxv-3,5-dimethoxv- | 1.575   | No data available             |  |  |  |  |

Mobility in soil Spillage unlikely to penetrate soil The product is insoluble and sinks in water The product

evaporates slowly Is not likely mobile in the environment due its low water solubility

Spillage unlikely to penetrate soil

**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

Not regulated IMDG/IMO

Page 7/8 Revision Date 05-Apr-2024

3,5-Dimethoxy-4-hydroxybenzaldehyde

Not regulated IATA

**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 (ISHL), Australia (AICS), Korea (KECL).

| Component                                     | The<br>Inventory of<br>Hazardous<br>Chemicals<br>(2015<br>Edition) |   | TCSI | IECSC | EINECS    | TSCA | DSL | PICCS | ENCS | ISHL | AICS | KECL |
|---|--|---|------|-------|-----------|------|-----|-------|------|------|------|------|
| Benzaldehyde,<br>4-hydroxy-3,5-dimetho<br>xy- | -  | - | Х    | ı     | 205-167-5 | X    | X   | Х     | X    | X    | Х    | -    |

## **National Regulations**

# **SECTION 16. OTHER INFORMATION**

**Creation Date** 11-Oct-2005 **Revision Date** 05-Apr-2024 **Revision Summary** Not applicable.

# **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

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

Substances/EU List of Notified Chemical Substances

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances IECSC - Chinese Inventory of Existing Chemical Substances **KECL** - Korean Existing and Evaluated Chemical Substances

**ENCS** - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit **ACGIH** - American Conference of Governmental Industrial Hygienists TWA - Time Weighted Average IARC - International Agency for Research on Cancer

**DNEL** - Derived No Effect Level RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50%

PNEC - Predicted No Effect Concentration LD50 - Lethal Dose 50%

NOEC - No Observed Effect Concentration

EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water

PBT - Persistent, Bioaccumulative, Toxic

vPvB - very Persistent, very Bioaccumulative

ACR13288

# SAFETY DATA SHEET

Page 8/8 Revision Date 05-Apr-2024

## 3,5-Dimethoxy-4-hydroxybenzaldehyde

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

**ADR** - European Agreement Concerning the International Carriage of Dangerous Goods by Road

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

**MARPOL** - International Convention for the Prevention of Pollution from Ships

ATE - Acute Toxicity Estimate

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

#### **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of Safety Data Sheet** 

\_\_\_\_\_