## Material Safety Data Sheet

Date Printed: 22/APR/2005
Date Updated: 16/MAR/2004
Version 1.2
According to 91/155/EEC

Classified as Hazardous according to the criteria of EU Annex 1 and NOHSC.

# 1 - Product and Company Information

Product Name Product Number	3,4-DIMETHOXYBENZALDEHYDE, 99% 143758
Company	Sigma-Aldrich Pty, Ltd Unit 2, 14 Anella Avenue Castle Hill NSW 1765 Australia
Technical Phone # Fax Emergency Phone #	+61 2 9841 0555 +61 2 9841 0500 +61 2 9841 0566

## 2 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I Index Number
3,4-DIMETHOXYBENZALDEHYDE	120-14-9	204-373-2	None

Formula C9H10O3 Molecular Weight 166.18 AMU

Synonyms Benzaldehyde, 3,4-dimethoxy- \* 3,4-Dimethoxybenzaldehyde \*

3,4-Dimethoxybenzenecarbonal \* Methylvanillin \*

4-O-Methylvanillin \* Protocatechualdehyde

p-Veratric aldehyde \* Veratryl aldehyde

dimethyl ether \* Protocatechuecaldehyde dimethyl
ether \* Protocatechuic aldehyde dimethyl ether \*
Vanillin methyl ether \* Veratric aldehyde \*

### 3 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT Harmful if swallowed. Irritating to skin.

## 4 - First Aid Measures

### AFTER INHALATION

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

## AFTER SKIN CONTACT

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

# AFTER EYE CONTACT

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by

separating the eyelids with fingers. Call a physician.

### AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

# 5 - Fire Fighting Measures

### EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

### SPECIAL RISKS

Specific Hazard(s): Emits toxic fumes under fire conditions.

## SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

## 6 - Accidental Release Measures

PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL Evacuate area.

### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

### METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

# 7 - Handling and Storage

### HANDLING

Directions for Safe Handling: Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

## **STORAGE**

Conditions of Storage: Keep tightly closed.

## 8 - Exposure Controls / Personal Protection

## ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

## GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

## PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Government approved respirator. Hand Protection: Compatible chemical-resistant gloves. Eye Protection: Chemical safety goggles.

# 9 - Physical and Chemical Properties

Appearance Physical State: Solid Color: Faintly beige

Form: Crystalline

```
Property
                       Value
                                           At Temperature or Pressure
Нq
                       N/A
                       281 °C
BP/BP Range
                                            760 mmHg
                       41 °C
MP/MP Range
Flash Point
                       113 °C
                                           Method: closed cup
Flammability
                       N/A
Autoignition Temp
                       N/A
Oxidizing Properties N/A
Explosive Properties
                       N/A
Explosion Limits
                       N/A
Vapor Pressure
                       N/A
SG/Density
                       N/A
Partition Coefficient
                       N/A
Viscosity
                       N/A
Vapor Density
                       N/A
Saturated Vapor Conc. N/A
Evaporation Rate
                       N/A
Bulk Density
                       N/A
Decomposition Temp.
                      N/A
Solvent Content
                       N/A
Water Content
                       N/A
Surface Tension
                      N/A
Conductivity
                       N/A
Miscellaneous Data
                      N/A
Solubility
                       N/A
10 - Stability and Reactivity
STABILITY
   Stable: Stable.
   Materials to Avoid: Strong oxidizing agents, Strong bases.
HAZARDOUS DECOMPOSITION PRODUCTS
   Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.
HAZARDOUS POLYMERIZATION
   Hazardous Polymerization: Will not occur
11 - Toxicological Information
RTECS NUMBER: YX5088000
ACUTE TOXICITY
   LD50
   Oral
   Rat
   2000 mg/kg
   LD50
   Oral
   Mouse
   3200 mg/kg
   Remarks: Behavioral: Altered sleep time (including change in
   righting reflex). Behavioral: Ataxia. Gastrointestinal: Alteration
   in gastric secretion.
   LD50
   Skin
   Rabbit
```

> 5000 mg/kg

#### IRRITATION DATA

Skin Rabbit 500 mg

24H

Remarks: Moderate irritation effect

### SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### ROUTE OF EXPOSURE

Skin Contact: Causes skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: Causes eye irritation.

Inhalation: May be harmful if inhaled. Material is irritating to

mucous membranes and upper respiratory tract.

Ingestion: Harmful if swallowed.

# 12 - Ecological Information

### No data available.

### 13 - Disposal Considerations

### SUBSTANCE DISPOSAL

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

## 14 - Transport Information

## RID/ADR

Non-hazardous for road transport.

## **IMDG**

Non-hazardous for sea transport.

#### IATA

Non-hazardous for air transport.

# 15 - Regulatory Information

## CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

INDICATION OF DANGER: Xn

Harmful.

R-PHRASES: 22 38

Harmful if swallowed. Irritating to skin.

S-PHRASES: 22 24/25

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

#### SWITZERLAND

SWISS POISON CLASS: 4

## 16 - Other Information

## WARRANTY

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. Sigma-Aldrich Inc., 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. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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