

# Material Safety Data Sheet



3-NITROBENZALDEHYDE

VERSION : 04  
DATE OF ISSUE : 01-08-2023  
SUPERSEDES : 03

Product Code : 16575

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## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Trade name : 3-NITROBENZALDEHYDE  
Product code : 16575  
Identification of the product : 3-NITROBENZALDEHYDE  
CAS No : 99-61-6

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

Identified uses : Laboratory chemicals, Manufacture of substances

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

Company identification : MOLYCHEM  
Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor,  
Mumbai – 400 002 (INDIA)  
Tel:+91 22 4066 8111, 2205 7772 . Fax: + 91 22 2203 4442.  
Email : [info@molychem.net](mailto:info@molychem.net)  
Works: Plot No. B/9, Badlapur M.I.D.C.,OPP.Shobhavat  
Textile Co.,Kulgaon, Badlapur (E), Dist.-Thane-421 503.

### 1.4. Emergency telephone number

Emergency number : +91 22 4066 8111 (10:00am - 6:00 pm)

## 2. Hazards identification –DSD

### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 4), H302

Long-term (chronic) aquatic hazard (Category 2), H411

### 2.2. Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal Word

Warning

Hazard statement(s)

H302

Harmful if swallowed.

H411

Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P264

Wash skin thoroughly after handling.

P270

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

P273

Avoid release to the environment.

P301 + P312

IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.

P391

Collect spillage.

P501

Dispose of contents/ container to an approved waste disposal plant.

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Supplemental Hazard none  
Statements

**2.3. Other hazards :** This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### **3.Composition/information on ingredients**

#### **3.1 Substances**

Formula :  $C_7H_5NO_3$   
Molecular weight : 151.12 g/mol  
CAS-No. : 99-61-6  
EC-No. : 202-772-6

Component	Classification	Concentration
<b>3-nitrobenzaldehyde</b>		
CAS-No. 99-61-6	Acute Tox. 4; Aquatic	<= 100 %
EC-No. 202-772-6	Chronic 2; H302, H411	

### **4. First aid measures**

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

##### **General advice**

Show this material safety data sheet to the doctor in attendance.

##### **If inhaled**

After inhalation: fresh air.

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

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

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

After eye contact: rinse out with plenty of water. Remove contact lenses.

##### **If swallowed**

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

#### **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**

Water Foam Carbon dioxide (CO2) Dry powder

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## **Unsuitable extinguishing media**

For this substance/mixture no limitations of extinguishing agents are given.

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

Carbon oxides

Nitrogen oxides (NO<sub>x</sub>)

Combustible.

Development of hazardous combustion gases or vapours possible in the event of fire.

## **5.3. Advice for fire-fighters**

In the event of fire, wear self-contained breathing apparatus.

## **5.4 Further information**

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## **6. Accidental release measures**

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

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

### **6.2. Environmental precautions**

Do not let product enter drains.

### **6.3. Methods and material for containment and cleaning up**

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

### **6.4. Reference to other sections**

For disposal see section 13.

## **7. Handling and storage**

### **7.1. Precautions for safe handling**

For precautions see section 2.2.

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

#### **Storage conditions**

Tightly closed. Dry.

#### **Storage stability**

Recommended storage temperature

Ambient

#### **Storage class**

Storage class (TRGS 510): 11: Combustible Solids

### **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**

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## 8.1. Exposure controls

Personal protection : Avoid all unnecessary exposure.  
Respiratory protection : Wear approved mask.  
Hand protection : Wear protective gloves.  
Skin protection : Wear suitable protective clothing.  
Eye protection : Chemical goggles or safety glasses.  
Others : When using, do not eat, drink or smoke.

## 8.2. Control parameters

Occupational Exposure Limits : No data available.

## 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Solid  
Color : No data available  
Odor : No data available  
Melting point/freezing point : Melting point/range: 54 - 57°C  
Initial boiling point and boiling range : 164 °C at 31 hPa  
Flammability (solid, gas) : The product is not flammable.  
Upper/lower flammability or explosive limits : No data available  
Flash point : Not applicable  
Autoignition temperature : No data available  
Decomposition temperature : No data available  
pH : No data available  
Viscosity : Viscosity, kinematic : No data available  
Viscosity, dynamic : No data available  
Water solubility : No data available  
Partition coefficient: n-octanol/water : No data available  
Vapor pressure : No data available  
Density : No data available  
Relative density : No data available  
Relative vapor density : No data available  
Particle characteristics : No data available  
Explosive properties : No data available  
Oxidizing properties : None

### 9.2. Other information

No data available

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## **10. Stability and reactivity**

### **10.1. Reactivity**

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

### **10.2. Chemical stability**

The product is chemically stable under standard ambient conditions (room temperature) .

### **10.3. Possibility of hazardous reactions**

Violent reactions possible with:

Strong oxidizing agents

Strong bases

### **10.4. Conditions to avoid**

no information available

### **10.5. Incompatible materials**

No data available

### **10.6. Hazardous decomposition products**

In the event of fire: see section 5

## **11. Toxicological information**

### **11.1. Information on toxicological effects**

Acute toxicity	: Not classified
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

## **12. Ecological information**

### **12.1. Toxicity**

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 5,8 mg/l - 96 h  
Remarks: (ECOTOX Database)

### **12.2 Persistence and degradability**

No data available

### **12.3 Bioaccumulative potential**

No data available

### **12.4 Mobility in soil**

No data available

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## 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## 12.6 Endocrine disrupting properties

### Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## 12.7 Other adverse effects

Discharge into the environment must be avoided.

## 13. Disposal considerations

### 13.1. Waste treatment methods

No data available

## 14. Transport information

### 14.1. UN number

ADR/RID: - 3077

IMDG : 3077

IATA: 3077

### 14.2. UN proper shipping name

ADR/RID :

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (3- nitrobenzaldehyde) (3-nitrobenzaldehyde)

IMDG:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (3- nitrobenzaldehyde) (3-nitrobenzaldehyde)

IATA:

Environmentally hazardous substance, solid, n.o.s. (3- nitrobenzaldehyde) (3- nitrobenzaldehyde)

### 14.3. Transport hazard class(es)

ADR/RID : 9

IMDG : 9

IATA : 9

### 14.4. Packaging group

ADR/RID : III

IMDG : III

IATA : III

### 14.5 Environmental hazards

ADR/RID : yes

IMDG : Marine pollutant: yes

IATA : yes

### 14.6 Special precautions for user

Tunnel restriction code : (-)

#### **Further information**

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids. Packages smaller than or equal to 5 kg / L , not dangerous goods of Class 9

## 15. Regulatory information

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## 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

### National legislation

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

E2

ENVIRONMENTAL HAZARDS

### Other regulations

Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.

Take note of Dir 94/33/EC on the protection of young people at work.

## 15.2. Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

## 16. Other information

### Abbreviations and acronyms :

PBT : persistent, bioaccumulative and toxic.

vPvB: very persistent and very bioaccumulative

**Sources of key data used :** REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

**Further information :** None.

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008  
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### End of document

**Prepared by:** MOLYCHEM (INDIA)

**For questions contact:** MOLYCHEM


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Cuffe Parade, Mumbai 400 005 (INDIA)

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