

 <p><b>CHEMLABS</b> Quality Our Forte</p>	<p><b>LEONID CHEMICALS PVT. LTD., BANGALORE</b></p> <p>An ISO-9001:2008 Certified Company</p> <p><b>Quality Assurance Department</b></p>	<p>(CODE) DOCUMENT : WI (CODE) SECTION : WI/SM (DATE) : 01.04.2011</p>	 <p>Issue : 02 Rev.: 00</p>
<p>Title: MATERIAL SAFETY DATA SHEET (MSDS): 3-NITROBENZALDEHYDE</p>			<p>1   Page of 1</p>

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product name:**  
3-Nitrobenzaldehyde

**Cat No.:**  
N023

**CAS-No. :**  
99-61-6

**Synonyms:**  
m-Nitrobenzaldehyde; m-FormylNitrobenzene; 5-Nitrobenzaldehyde ; 3-FormylNitrobenzene

### Company Information:

LEONID CHEMICALS Pvt Ltd,  
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## 2. HAZARDS IDENTIFICATION

**Classification of the substance or mixture**  
Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]  
Skin irritation (Category 2)  
Eye irritation (Category 2)  
Specific target organ toxicity - single exposure (Category 3)  
Classification according to EU Directives 67/548/EEC or 1999/45/EC  
Irritating to eyes, respiratory system and skin.

### Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]  
Pictogram  
Signal word Warning  
Hazard statement(s)  
H315 Causes skin irritation.

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H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary statement(s)

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

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

Supplemental Hazard

Statements

none

According to European Directive 67/548/EEC as amended.

Hazard symbol(s)

R-phrase(s)

R36/37/38 Irritating to eyes, respiratory system and skin.

S-phrase(s)

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36 Wear suitable protective clothing.

Other hazards - none

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula: C<sub>7</sub>H<sub>5</sub>NO<sub>3</sub>

Molecular Weight: 151.12 g/mol

CAS-No.: 99-61-6

### 4. FIRST AID MEASURES

Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

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

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed

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

**Indication of immediate medical attention and special treatment needed**  
no data available

## 5. FIRE-FIGHTING MEASURES

### Extinguishing media

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Carbon oxides, nitrogen oxides (NO<sub>x</sub>)

#### Precautions for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### Further information

no data available

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

### Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### Reference to other sections

For disposal see section 13.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

### Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

### Specific end uses

no data available

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

### Components with workplace control parameters

### Exposure controls

### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### Personal protective equipment

#### Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### 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.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### Body Protection

impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

- Appearance Form: crystalline
- Colour: light yellow
- Odour: no data available
- Odour Threshold: no data available
- pH: no data available
- Melting/freezing point Melting point/range: 55 - 58 °C
- Initial boiling point and boiling range: no data available
- Flash point: no data available
- Evaporation rate: no data available

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- i) Flammability (solid, gas): no data available
- j) Upper/lower flammability or explosive limits: no data available
- k) Vapour pressure: no data available
- l) Vapour density: no data available
- m) Relative density: no data available
- n) Water solubility: no data available
- o) Partition coefficient: noctanol/water: no data available
- p) Autoignition temperature: no data available
- q) Decomposition temperature: no data available
- r) Viscosity: no data available
- s) Explosive properties: no data available
- t) Oxidizing properties: no data available

**Other safety information**

no data available

**10. STABILITY AND REACTIVITY**

**Reactivity**

no data available

**Chemical stability**

no data available

**Possibility of hazardous reactions**

no data available

**Conditions to avoid**

no data available

**Incompatible materials**

Strong oxidizing agents, Strong bases

**Hazardous decomposition products**

Other decomposition products - no data available

**11. TOXICOLOGICAL INFORMATION**

**Information on toxicological effects**

**Acute toxicity**

no data available

**Skin corrosion/irritation**

no data available

**Serious eye damage/eye irritation**

no data available

**Respiratory or skin sensitization**

no data available

**Germ cell mutagenicity**

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no data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Reproductive toxicity**

no data available

**Specific target organ toxicity - single exposure**

Inhalation - May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure**

no data available

**Aspiration hazard**

no data available

**Potential health effects**

**Inhalation** May be harmful if inhaled. Causes respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. Causes skin irritation.

**Eyes** Causes serious eye irritation.

**Signs and Symptoms of Exposure**

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

**Additional Information**

RTECS: CU7250000

**12. ECOLOGICAL INFORMATION**

**Toxicity**

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

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**Results of PBT and vPvB assessment**

no data available

**Other adverse effects**

Toxic to aquatic life.

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

Product

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Offer surplus and non-recyclable solutions to a licensed disposal company. 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.

**Contaminated packaging**

Dispose of as unused product.

**14. TRANSPORT INFORMATION**

**UN-Number**

ADR/RID: - IMDG: - IATA: -

**UN proper shipping name**

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

**Transport hazard class(es)**

ADR/RID: - IMDG: - IATA: -

**Packaging group**

ADR/RID: - IMDG: - IATA: -

**Environmental hazards**

ADR/RID: no IMDG Marine pollutant: no IATA: no

**Special precautions for users**

no data available

**15. REGULATORY INFORMATION**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. Safety, health and environmental regulations/legislation specific for the substance or mixture

no data available



**Chemical Safety Assessment**

no data available

**16. OTHER INFORMATION**

**Further information**

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Leonid Chemicals Pvt. Ltd. be liable for any claims, losses, or damages of any third party or for lost profits or any

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special, indirect, incidental, consequential or exemplary damages, however arising, even if Leonid Chemicals Pvt. Ltd. has been advised of the possibility of such damages.





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### Specification manual – 3-Nitrobenzaldehyde

**C<sub>7</sub>H<sub>5</sub>NO<sub>3</sub>**

**MW: 151.12**

**Product** : 3-Nitrobenzaldehyde  
**Description** : Yellowish to yellow brown powder  
**Cat No** : N023  
**Cas no.** : 99-61-6  
**Prepared Date** : 20-01-2011  
**Approved Date** : 20-01-2011

REVISION HISTORY			
Issue/Rev	Description of Change	Author	Effective Date
01/00	Initial Release	S. Paul Joshua	20.01.2011
02/00	Reviewed no changes	S. Paul Joshua	NA
Next Review Due :	02.04.2015		
To be reviewed by :	Head-QC/QA		

Sl. No.	Tests	Limits
1	Melting point	55-58°C
2	Assay (GC)	Min 94.0 %
3	Identification	To conform IR

Approved By: S.Paul Joshua, Head Quality Control and Quality Assurance

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