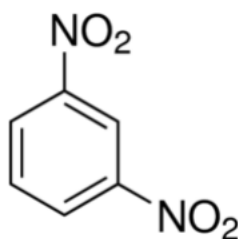


## MATERIAL SAFETY DATA SHEET (MSDS)

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

## 1.1. Product identifier

Product form : Substance  
CAS-No. : 99-65-0  
Product code : 03440  
Formula : C<sub>6</sub>H<sub>4</sub>N<sub>2</sub>O<sub>4</sub>  
Chemical structure :



Synonyms : 1,3-Dinitrobenzene

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

## 1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial  
For professional use only

## 1.2.2. Uses advised against

No additional information available

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

Labogens Fine Chem Industries  
1st Floor , Above Bank of India, Guru Vihar , Rahon Road,  
Ludhiana Pb. (141007)  
+91 9316777775, +91 7707855700  
[sales@labogens.com](mailto:sales@labogens.com) - [www.Labogens.com](http://www.Labogens.com)

## 1.4. Emergency telephone number

Emergency number : +91 7707855700 (9:00am - 6:00 pm)

## SECTION 2: Hazards identification

## 2.1. Classification of the substance or mixture

## Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), H300  
Category 1  
Acute toxicity (dermal), H310  
Category 1  
Acute toxicity (inhal.), H330  
Category 2

# m-DINITROBENZENE AR

## Safety Data Sheet

Specific target organ toxicity — Repeated exposure, Category 2 H373  
Hazardous to the aquatic environment — Chronic Hazard, Category 1 H410

Full text of H statements : see section 16

### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

T+; R26/27/28  
N; R50/53  
R33

Full text of R-phrases: see section 16

### Adverse physicochemical, human health and environmental effects

No additional information available

## 2.2. Label elements

### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS06



GHS08



GHS09

Signal word (CLP) : Danger

Hazard statements (CLP) : H300+H310+H330 - Fatal if swallowed, in contact with skin or if inhaled  
H373 - May cause damage to organs through prolonged or repeated exposure.  
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P260 - Do not breathe vapours, spray, dust, fume, gas.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P273 - Avoid release to the environment.  
P280 - Wear protective gloves, protective clothing, eye protection, face protection.  
P284 - Wear respiratory protection.  
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.

## 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name : m-DINITROBENZENE AR  
CAS-No. : 99-65-0

# m-DINITROBENZENE AR

## Safety Data Sheet

Full text of R- and H-statements: see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

|                                       |                                                                                                                                                      |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| First-aid measures after inhalation   | : Assure fresh air breathing. Allow the victim to rest.                                                                                              |
| First-aid measures after skin contact | : Immediately call a POISON CENTER/doctor. Gently wash with plenty of soap and water. Wash contaminated clothing before reuse.                       |
| First-aid measures after eye contact  | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention. |
| First-aid measures after ingestion    | : Rinse mouth. Immediately call a POISON CENTER/doctor.                                                                                              |

### 4.2. Most important symptoms and effects, both acute and delayed

|                                     |                               |
|-------------------------------------|-------------------------------|
| Symptoms/effects after skin contact | : Fatal in contact with skin. |
| Symptoms/effects after ingestion    | : Fatal if swallowed.         |

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

|                                |                                                  |
|--------------------------------|--------------------------------------------------|
| Suitable extinguishing media   | : Carbon dioxide. Dry powder. Foam. Water spray. |
| Unsuitable extinguishing media | : Do not use a heavy water stream.               |

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

No additional information available

### 5.3. Advice for firefighters

|                                |                                                                                                 |
|--------------------------------|-------------------------------------------------------------------------------------------------|
| Protection during firefighting | : Do not enter fire area without proper protective equipment, including respiratory protection. |
|--------------------------------|-------------------------------------------------------------------------------------------------|

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

|                      |                                   |
|----------------------|-----------------------------------|
| Emergency procedures | : Evacuate unnecessary personnel. |
|----------------------|-----------------------------------|

#### 6.1.2. For emergency responders

|                      |                                                  |
|----------------------|--------------------------------------------------|
| Protective equipment | : Use personal protective equipment as required. |
| Emergency procedures | : Ventilate area.                                |

### 6.2. Environmental precautions

Very toxic to aquatic life with long lasting effects.

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

|                         |                                                                                                                                                |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Methods for cleaning up | : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers. |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|

### 6.4. Reference to other sections

No additional information available

# m-DINITROBENZENE AR

## Safety Data Sheet

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Do not get in eyes, on skin, or on clothing. Avoid contact with skin and eyes. Do not breathe vapours. Provide good ventilation in process area to prevent formation of vapour.
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

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

- Storage conditions : Store in a well-ventilated place. Keep container tightly closed.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

#### 8.2. Exposure controls

- Hand protection : Protective gloves
- Eye protection : Chemical goggles or safety glasses
- Skin and body protection : Wear suitable protective clothing
- Respiratory protection : [In case of inadequate ventilation] wear respiratory protection.

### SECTION 9: Physical and chemical properties

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

- Physical state : Solid
- Molecular mass : 168.11 g/mol
- Colour : Yellow Crystals.
- Odour : No data available
- Odour threshold : No data available
- pH : No data available
- Relative evaporation rate (butylacetate=1) : No data available
- Melting point : 89 °C
- Freezing point : No data available
- Boiling point : 291 °C
- Flash point : 150 °C
- Auto-ignition temperature : No data available
- Decomposition temperature : No data available

# m-DINITROBENZENE AR

## Safety Data Sheet

|                                  |                                    |
|----------------------------------|------------------------------------|
| Flammability (solid, gas)        | : No data available                |
| Vapour pressure                  | : No data available                |
| Relative vapour density at 20 °C | : No data available                |
| Relative density                 | : No data available                |
| Density                          | : 1.36 g/cm <sup>3</sup>           |
| Solubility                       | : Water: Slightly soluble in water |
| Log Pow                          | : No data available                |
| Viscosity, kinematic             | : No data available                |
| Viscosity, dynamic               | : No data available                |
| Explosive properties             | : No data available                |
| Oxidising properties             | : No data available                |
| Explosive limits                 | : No data available                |

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Air contact. Direct sunlight. Moisture.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Oral: Fatal if swallowed. Dermal: Fatal in contact with skin. Inhalation: Fatal if inhaled.

|                                   |                  |
|-----------------------------------|------------------|
| Skin corrosion/irritation         | : Not classified |
| Serious eye damage/irritation     | : Not classified |
| Respiratory or skin sensitisation | : Not classified |
| Germ cell mutagenicity            | : Not classified |
| Carcinogenicity                   | : Not classified |

# m-DINITROBENZENE AR

## Safety Data Sheet

|                        |                                                                      |
|------------------------|----------------------------------------------------------------------|
| Reproductive toxicity  | : Not classified                                                     |
| STOT-single exposure   | : Not classified                                                     |
| STOT-repeated exposure | : May cause damage to organs through prolonged or repeated exposure. |
| Additional information | : There are potential chronic health effects to consider             |
| Aspiration hazard      | : Not classified                                                     |

Potential adverse human health effects and symptoms : Fatal if swallowed. Fatal in contact with skin.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - water : Very toxic to aquatic life with long lasting effects.

#### 12.2. Persistence and degradability

##### m-DINITROBENZENE AR (99-65-0)

|                               |                                                         |
|-------------------------------|---------------------------------------------------------|
| Persistence and degradability | May cause long-term adverse effects in the environment. |
|-------------------------------|---------------------------------------------------------|

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

|                                            |                                                                                                                                                               |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product/Packaging disposal recommendations | : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. |
| Ecology - waste materials                  | : Hazardous waste due to toxicity.                                                                                                                            |

### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

#### 14.1. UN number

|               |        |
|---------------|--------|
| UN-No. (ADR)  | : 3443 |
| UN-No. (IMDG) | : 3443 |

# m-DINITROBENZENE AR

## Safety Data Sheet

|               |        |
|---------------|--------|
| UN-No. (IATA) | : 3443 |
| UN-No. (ADN)  | : 3443 |
| UN-No. (RID)  | : 3443 |

### 14.2. UN proper shipping name

|                                       |                                                                                       |
|---------------------------------------|---------------------------------------------------------------------------------------|
| Proper Shipping Name (ADR)            | : DINITROBENZENES, SOLID                                                              |
| Proper Shipping Name (IMDG)           | : DINITROBENZENES, SOLID                                                              |
| Proper Shipping Name (IATA)           | : Dinitrobenzenes, solid                                                              |
| Proper Shipping Name (ADN)            | : DINITROBENZENES, SOLID                                                              |
| Proper Shipping Name (RID)            | : DINITROBENZENES, SOLID                                                              |
| Transport document description (ADR)  | : UN 3443 DINITROBENZENES, SOLID, 6.1, II, (D/E), ENVIRONMENTALLY HAZARDOUS           |
| Transport document description (IMDG) | : UN 3443 DINITROBENZENES, SOLID, 6.1, II, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS |
| Transport document description (IATA) | : UN 3443 Dinitrobenzenes, solid, 6.1, II, ENVIRONMENTALLY HAZARDOUS                  |
| Transport document description (ADN)  | : UN 3443 DINITROBENZENES, SOLID, 6.1, II, ENVIRONMENTALLY HAZARDOUS                  |
| Transport document description (RID)  | : UN 3443 DINITROBENZENES, SOLID, 6.1, II, ENVIRONMENTALLY HAZARDOUS                  |

### 14.3. Transport hazard class(es)

#### ADR

|                                  |       |
|----------------------------------|-------|
| Transport hazard class(es) (ADR) | : 6.1 |
| Danger labels (ADR)              | : 6.1 |



#### IMDG

|                                   |       |
|-----------------------------------|-------|
| Transport hazard class(es) (IMDG) | : 6.1 |
| Danger labels (IMDG)              | : 6.1 |



#### IATA

|                                   |       |
|-----------------------------------|-------|
| Transport hazard class(es) (IATA) | : 6.1 |
| Hazard labels (IATA)              | : 6.1 |



#### ADN

|                                  |       |
|----------------------------------|-------|
| Transport hazard class(es) (ADN) | : 6.1 |
| Danger labels (ADN)              | : 6.1 |



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## Safety Data Sheet

### RID

Transport hazard class(es) (RID) : 6.1

Danger labels (RID) : 6.1



### 14.4. Packing group

Packing group (ADR) : II

Packing group (IMDG) : II

Packing group (IATA) : II

Packing group (ADN) : II

Packing group (RID) : II

### 14.5. Environmental hazards

Dangerous for the environment : Yes

Marine pollutant : Yes

Other information : No supplementary information available

### 14.6. Special precautions for user

#### - Overland transport

Classification code (ADR) : T2

Limited quantities (ADR) : 500g

Excepted quantities (ADR) : E4

Packing instructions (ADR) : P002, IBC08

Special packing provisions (ADR) : B4

Mixed packing provisions (ADR) : MP10

Portable tank and bulk container instructions (ADR) : T3

Portable tank and bulk container special provisions (ADR) : TP33

Tank code (ADR) : SGAH, L4BH

Tank special provisions (ADR) : TU15, TE19

Vehicle for tank carriage : AT

Transport category (ADR) : 2

Special provisions for carriage - Packages (ADR) : V11

Special provisions for carriage - Loading, unloading and handling (ADR) : CV13, CV28

Special provisions for carriage - Operation (ADR) : S9, S19

Hazard identification number (Kemler No.) : 60

Orange plates :

Tunnel restriction code (ADR) : D/E

EAC code : 2X

#### - Transport by sea

Packing instructions (IMDG) : P002

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## Safety Data Sheet

|                                    |                                                                                            |
|------------------------------------|--------------------------------------------------------------------------------------------|
| IBC packing instructions (IMDG)    | : IBC08                                                                                    |
| IBC special provisions (IMDG)      | : B21, B4                                                                                  |
| Tank instructions (IMDG)           | : T3                                                                                       |
| Tank special provisions (IMDG)     | : TP33                                                                                     |
| EmS-No. (Fire)                     | : F-A                                                                                      |
| EmS-No. (Spillage)                 | : S-A                                                                                      |
| Stowage category (IMDG)            | : A                                                                                        |
| Segregation (IMDG)                 | : SG15                                                                                     |
| Properties and observations (IMDG) | : May explode if involved in a fire. Toxic if swallowed, by skin contact or by inhalation. |
| MFAG-No                            | : 152                                                                                      |

### - Air transport

|                                              |         |
|----------------------------------------------|---------|
| PCA Excepted quantities (IATA)               | : E4    |
| PCA Limited quantities (IATA)                | : Y644  |
| PCA limited quantity max net quantity (IATA) | : 1kg   |
| PCA packing instructions (IATA)              | : 669   |
| PCA max net quantity (IATA)                  | : 25kg  |
| CAO packing instructions (IATA)              | : 676   |
| CAO max net quantity (IATA)                  | : 100kg |
| ERG code (IATA)                              | : 6L    |

### - Inland waterway transport

|                                   |          |
|-----------------------------------|----------|
| Classification code (ADN)         | : T2     |
| Special provisions (ADN)          | : 802    |
| Limited quantities (ADN)          | : 500 g  |
| Excepted quantities (ADN)         | : E4     |
| Equipment required (ADN)          | : PP, EP |
| Number of blue cones/lights (ADN) | : 2      |

### - Rail transport

|                                                                         |                    |
|-------------------------------------------------------------------------|--------------------|
| Classification code (RID)                                               | : T2               |
| Excepted quantities (RID)                                               | : E4               |
| Packing instructions (RID)                                              | : P002, IBC08      |
| Special packing provisions (RID)                                        | : B4               |
| Mixed packing provisions (RID)                                          | : MP10             |
| Portable tank and bulk container instructions (RID)                     | : T3               |
| Portable tank and bulk container special provisions (RID)               | : TP33             |
| Tank codes for RID tanks (RID)                                          | : SGAH, L4BH       |
| Special provisions for RID tanks (RID)                                  | : TU15             |
| Transport category (RID)                                                | : 2                |
| Special provisions for carriage – Packages (RID)                        | : W11              |
| Special provisions for carriage - Loading, unloading and handling (RID) | : CW13, CW28, CW31 |
| Colis express (express parcels) (RID)                                   | : CE9              |
| Hazard identification number (RID)                                      | : 60               |

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

# m-DINITROBENZENE AR

## Safety Data Sheet

### SECTION 15: Regulatory information

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

##### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

m-DINITROBENZENE AR is not on the REACH Candidate List

m-DINITROBENZENE AR is not on the REACH Annex XIV List

##### 15.1.2. National regulations

###### Germany

Reference to AwSV : Water hazard class (WGK) 3, severe hazard to water (Classification according to AwSV; ID No. 84)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

###### Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

###### Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product  
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

#### 15.2. Chemical safety assessment

No additional information available

### SECTION 16: Other information

Full text of R-, H- and EUH-statements:

|                           |                                                                   |
|---------------------------|-------------------------------------------------------------------|
| Acute Tox. 1 (Dermal)     | Acute toxicity (dermal), Category 1                               |
| Acute Tox. 1 (Oral)       | Acute toxicity (oral), Category 1                                 |
| Acute Tox. 2 (Inhalation) | Acute toxicity (inhal.), Category 2                               |
| Aquatic Chronic 1         | Hazardous to the aquatic environment — Chronic Hazard, Category 1 |

# m-DINITROBENZENE AR

## Safety Data Sheet

|           |                                                                                                 |
|-----------|-------------------------------------------------------------------------------------------------|
| STOT RE 2 | Specific target organ toxicity — Repeated exposure, Category 2                                  |
| H300      | Fatal if swallowed.                                                                             |
| H310      | Fatal in contact with skin.                                                                     |
| H330      | Fatal if inhaled.                                                                               |
| H373      | May cause damage to organs through prolonged or repeated exposure.                              |
| H410      | Very toxic to aquatic life with long lasting effects.                                           |
| R26/27/28 | Very toxic by inhalation, in contact with skin and if swallowed                                 |
| R33       | Danger of cumulative effects                                                                    |
| R50/53    | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment |
| N         | Dangerous for the environment                                                                   |
| T+        | Very toxic                                                                                      |

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*