# 1-CHLORO-2,4-DINITROBENZENE FOR SYNTHESIS MSDS

CAS-No.: 97-00-7 MSDS



# **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. : 97-00-7 Product code : 02759

Chemical structure :

#### 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 - 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), H301 Category 3

Acute toxicity (dermal), H311

Category 3

Acute toxicity (inhal.), H331

Category 3

Skin corrosion/irritation, H315

Category 2

Serious eye damage/eye H318

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irritation, Category 1

Specific target organ H373

toxicity — Repeated exposure, Category 2

Hazardous to the aquatic H410

environment — Chronic Hazard, Category 1

Full text of H statements: see section 16

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

Muta.Cat.3; R68 T; R23/24/25 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)



GHS05

GHS06



GHS08



Signal word (CLP) : Danger

Hazard statements (CLP) : H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

H373 - May cause damage to organs through prolonged or repeated exposure.

H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P261 - Avoid breathing vapours, dust, fume, gas.

P273 - Avoid release to the environment.

P280 - Wear protective gloves, protective clothing, eye protection, face protection. P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER/doctor P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. P362+P364 - Take off contaminated clothing and wash it before reuse.

P311 - Call a doctor.

#### 2.3. Other hazards

No additional information available

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### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Name : 1-CHLORO-2,4-DINITROBENZENE For Synthesis

CAS-No. : 97-00-7

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 : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Immediately call a POISON CENTER/doctor. Wash with plenty of water/.... Wash

contaminated clothing before reuse.

First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously

with water for several minutes.

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 : May cause damage to organs through prolonged or repeated exposure.

Symptoms/effects after inhalation : Toxic if inhaled.

Symptoms/effects after skin contact : Toxic in contact with skin. Causes skin irritation.

Symptoms/effects after eye contact : Causes serious eye damage.

Symptoms/effects after ingestion : Toxic 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

Avoid release to the environment.

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#### 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

### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Precautions for safe handling : 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 : Wear respiratory protection.

#### **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Physical state : Solid

Molecular mass : 202.55 g/mol Colour : Yellow Crystals.

Odour : almond-like.

Odour threshold : No data available

pH : No data available

Relative evaporation rate (butylacetate=1) : No data available

Melting point : 48 - 50 °C

Freezing point : No data available

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Boiling point : 315 °C

Flash point : 186 °C

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapour pressure : No data available

Relative vapour density at 20 °C : 6.98

Relative density : No data available

Density : 1.687 g/cm³ Solubility : Water: Insoluble

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 : 0.02 - 0.22 vol %

#### 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: Toxic if swallowed. Dermal: Toxic in contact with skin. Inhalation: Toxic if

inhaled.

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Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

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

: Toxic if swallowed. Toxic 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

#### 1-CHLORO-2,4-DINITROBENZENE For Synthesis (97-00-7)

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.

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### **SECTION 14: Transport information**

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

#### 14.1. UN number

UN-No. (ADR) : 3441 UN-No. (IMDG) : 3441 UN-No. (IATA) : 3441 UN-No. (ADN) : 3441 UN-No. (RID) : 3441

#### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : CHLORODINITROBENZENES, SOLID Proper Shipping Name (IMDG) : CHLORODINITROBENZENES, SOLID

Proper Shipping Name (IATA) : Chlorodinitrobenzenes, solid

Proper Shipping Name (ADN) : CHLORODINITROBENZENES, SOLID Proper Shipping Name (RID) : CHLORODINITROBENZENES, SOLID

Transport document description (ADR) : UN 3441 CHLORODINITROBENZENES, SOLID, 6.1, II, (D/E),

**ENVIRONMENTALLY HAZARDOUS** 

Transport document description (IMDG) : UN 3441 CHLORODINITROBENZENES, SOLID, 6.1, II, MARINE

POLLUTANT/ENVIRONMENTALLY HAZARDOUS

Transport document description (IATA) : UN 3441 Chlorodinitrobenzenes, solid, 6.1, II, ENVIRONMENTALLY HAZARDOUS Transport document description (ADN) : UN 3441 CHLORODINITROBENZENES, SOLID, 6.1, II, ENVIRONMENTALLY

**HAZARDOUS** 

Transport document description (RID) : UN 3441 CHLORODINITROBENZENES, 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



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#### ADN

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



**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
Special provisions (ADR) : 279
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 : T3

instructions (ADR)

Portable tank and bulk container special

provisions (ADR)

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 : V11

(ADR)

Special provisions for carriage - Loading,

unloading and handling (ADR)

: CV13, CV28

: TP33

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Special provisions for carriage - Operation : S9, S19

(ADR)

Hazard identification number (Kemler No.) : 60

Orange plates

60 3441

Tunnel restriction code (ADR) : D/E EAC code : 2X

#### - Transport by sea

Special provisions (IMDG) : 279 Packing instructions (IMDG) : P002 IBC packing instructions (IMDG) : IBC08 IBC special provisions (IMDG) : B21, B4 : T3 Tank instructions (IMDG) Tank special provisions (IMDG) : TP33 : F-A EmS-No. (Fire) : S-A EmS-No. (Spillage) Stowage category (IMDG) : A Segregation (IMDG) : SG15

Properties and observations (IMDG) : Crystals. Melting point: 27°C to 53°C. May explode if involved in a fire. Toxic if

swallowed, by skin contact or by inhalation.

MFAG-No : 153

#### - Air transport

PCA Excepted quantities (IATA) : E4
PCA Limited quantities (IATA) : Y644
PCA limited quantity max net quantity : 1kg
(IATA)

PCA packing instructions (IATA) : 669
PCA max net quantity (IATA) : 25kg
CAO packing instructions (IATA) : 676
CAO max net quantity (IATA) : 100kg
Special provisions (IATA) : A113
ERG code (IATA) : 6L

# - Inland waterway transport

Classification code (ADN) : T2

Special provisions (ADN) : 279, 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
Special provisions (RID) : 279
Excepted quantities (RID) : E4

Packing instructions (RID) : P002, IBC08

Special packing provisions (RID) : B4

Mixed packing provisions (RID) : MP10

Portable tank and bulk container : T3

instructions (RID)

Portable tank and bulk container special

provisions (RID)

: TP33

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# Safety Data Sheet

Tank codes for RID tanks (RID) : SGAH, L4BH

Special provisions for RID tanks (RID) : TU15
Transport category (RID) : 2
Special provisions for carriage – Packages : W11

(RID)

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

### **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

1-CHLORO-2,4-DINITROBENZENE For Synthesis is not on the REACH Candidate List

1-CHLORO-2,4-DINITROBENZENE For Synthesis is not on the REACH Annex XIV List

#### 15.1.2. National regulations

#### Germany

Reference to AwSV : Water hazard class (WGK) 2, significant hazard to water (Classification according to

AwSV; ID No. 1120)

12th Ordinance Implementing the Federal

Immission Control Act - 12.BlmSchV

: Is not subject of the 12. BlmSchV (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 : The substance is not listed

voortplanting giftige stoffen – Borstvoeding

NIET-limitatieve lijst van voor de

voortplanting giftige stoffen –

Vruchtbaarheid

NIET-limitatieve lijst van voor de

voortplanting giftige stoffen – Ontwikkeling

: The substance is not listed

: 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

The requirements from the Danish Working Environment Authorities regarding work

with carcinogens must be followed during use and disposal

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# 15.2. Chemical safety assessment

No additional information available

# **SECTION 16: Other information**

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

Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.
R23/24/25	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
R68	Possible risk of irreversible effects
N	Dangerous for the environment
Т	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

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