

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Reference number: 04989 Issue date: 30-01-2023 Revision date: 30-01-2023 Supersedes version of: 09-04-2015 Version: 1.0

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

1.1. Product identifier

Product form Substance

Trade name NITROMETHANE FOR SYNTHESIS

EC Index-No. 609-036-00-7 EC-No. 200-876-6 CAS-No. 75-52-5 Product code 04989 Type of product : Solvents CH3NO2 Formula

Chemical structure

Synonyms Nitrocarbol

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

LOBA CHEMIE PVT.LTD.

107 Wode House Road, Jehangir Villa, Colaba

400005 Mumbai

INDIA

T +91 22 6663 6663 - F +91 22 6663 6699 info@lobachemie.com - www.lobachemie.com

1.4. Emergency telephone number

Emergency number : + 91 22 6663 6663 (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]

Flammable liquids, Category 3 H226 Acute toxicity (oral), Category 4 H302

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

Adverse physicochemical, human health and environmental effects

Flammable liquid and vapour. Harmful if swallowed.

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2.2. Label elements

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

Hazard pictograms (CLP)





GHS02

GHS07

Signal word (CLP) : Warning

Hazard statements (CLP) : H226 - Flammable liquid and vapour.

H302 - Harmful if swallowed.

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

609-036-00-7

P280 - Wear protective clothing, eye protection, face protection, protective gloves. P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type: Mono-constituentName: NITROMETHANECAS-No.: 75-52-5EC-No.: 200-876-6

3.2. Mixtures

EC Index-No.

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial

respiration if necessary. If you feel unwell, seek medical advice.

First-aid measures after skin contact : Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

water for several minutes. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Call a POISON CENTER/doctor if you feel unwell. Call a poison center or a

doctor if you feel unwell.

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

Symptoms/effects after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

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

Treat symptomatically.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2). Water spray. Dry

powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapour.

Explosion hazard : May form flammable/explosive vapour-air mixture. Heat may build pressure, rupturing

closed containers, spreading fire and increasing risk of burns and injuries. Heating may

cause an explosion.

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Firefighting instructions : DO NOT fight fire when fire reaches explosives. Evacuate area.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames.

No smoking.

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. No open flames, no sparks, and

no smoking.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Use personal protective

equipment as required. For further information refer to section 8: "Exposure

controls/personal protection".

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Collect spillage. On land, sweep or shovel into

suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as

soon as possible. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable. Hazardous waste due to potential risk of explosion.

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Precautions for safe handling : Ensure good ventilation of the work station. No open flames. No smoking. Take

precautionary measures against static discharge. Use only non-sparking tools. Keep away from sources of ignition - No smoking. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment.

Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling. Always wash hands after handling the product.

Hygiene measures

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond

container and receiving equipment. Use explosion-proof electrical/ventilating/lighting

equipment.

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

cool.

Incompatible materials : Heat sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):







8.2.2.1. Eye and face protection

Eye protection:

Chemical goggles or safety glasses. Safety glasses

8.2.2.2. Skin protection

Hand protection:

Protective gloves

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8.2.2.3. Respiratory protection

Respiratory protection:

Wear appropriate mask

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Clear liquid.
Molecular mass : 61.04 g/mol

Colour

Colour

Colour

Colour

Colour

Colourless to Light yellow.

disagreeable fruity odor.

No data available

pH

Colour threshold

C

Relative evaporation rate (butylacetate=1) : 1.39

Melting point : Not applicable
Freezing point : -28.4 °C

Boiling point : 101.2 °C

Flash point : 35 °C

Auto-ignition temperature : 418 °C

Decomposition temperature : No data available Flammability (solid, gas) : Flammable

Flammable liquid and vapour, Not applicable

Vapour pressure : 36.4 hPa at 20 °C Relative vapour density at 20 °C : 2.11 (Air = 1.0) Relative density : 1.127 g/cm^3

Solubility : Water: 100 g/l at 20 °C

Partition coefficient n-octanol/water (Log Pow) : 0.17

Viscosity, kinematic : No data available Viscosity, dynamic : No data available

Explosive properties : Heating may cause an explosion.

Oxidising properties: No data availableExplosive limits: ≥ 0.073 vol %Lower explosive limit (LEL): 7.3 vol %Upper explosive limit (UEL): 63 vol %

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapour.

10.2. Chemical stability

Flammable liquid and vapour. May form flammable/explosive vapour-air mixture. Heating may cause an explosion. Extreme risk of explosion by shock, friction, fire or other sources of ignition.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

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10.4. Conditions to avoid

Open flame. Overheating. Direct sunlight. Heat. Sparks. Avoid contact with hot surfaces. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

May release flammable gases.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Skin corrosion/irritation : Not classified

pH: 6.4 (0.01 g/l at 20°C)

Serious eye damage/irritation : Not classified

pH: 6.4 (0.01 g/l at 20°C)

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 : Not classified Aspiration hazard : Not classified Potential adverse human health effects and : Harmful if swallowed.

symptoms

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse

effects in the environment.

Hazardous to the aquatic environment, short-term

(acute)

: Not classified

Hazardous to the aquatic environment, long-term

(chronic)

: Not classified

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

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Partition coefficient n-octanol/water (Log Pow) 0.17

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

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12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

Product/Packaging disposal recommendations

Dispose of contents/container in accordance with licensed collector's sorting instructions.

Dispose of contents/container to a licensed hazardous-waste disposal contractor or

collection site except for empty clean containers which can be disposed of as non-

hazardous waste.

Additional information

Handle empty containers with care because residual vapours are flammable. Hazardous waste due to potential risk of explosion. Flammable vapours may accumulate in the

SECTION 14: Transport information

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

14.1 UN number

UN-No. (ADR) : UN 1261 UN-No. (IMDG) UN 1261 UN-No. (IATA) UN 1261 UN-No. (ADN) UN 1261 UN-No. (RID) UN 1261

14.2. UN proper shipping name

Proper Shipping Name (ADR) : NITROMETHANE Proper Shipping Name (IMDG) : NITROMETHANE Proper Shipping Name (IATA) : Nitromethane Proper Shipping Name (ADN) : NITROMETHANE Proper Shipping Name (RID) : NITROMETHANE

Transport document description (ADR) : UN 1261 NITROMETHANE, 3, II, (E) Transport document description (IMDG) : UN 1261 NITROMETHANE, 3, II (35°C c.c.)

Transport document description (IATA) : UN 1261 Nitromethane, 3, II Transport document description (ADN) : UN 1261 NITROMETHANE, 3, II : UN 1261 NITROMETHANE, 3, II Transport document description (RID)

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 3 Danger labels (ADR) : 3



IMDG

Transport hazard class(es) (IMDG) 3 Danger labels (IMDG) 3



IATA

Transport hazard class(es) (IATA) : 3

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Danger labels (IATA)



ADN

Transport hazard class(es) (ADN) : 3 3 Danger labels (ADN) :



RID

Transport hazard class(es) (RID) : 3 3

Danger labels (RID)



14.4. Packing group

Packing group (ADR) : 11 Packing group (IMDG) : II Packing group (IATA) : 11 Packing group (ADN) Ш Packing group (RID) : 11

14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

: No supplementary information available Other information

14.6. Special precautions for user

Overland transport

Classification code (ADR) : F1 Limited quantities (ADR) : 11 Excepted quantities (ADR) : E0 Packing instructions (ADR) : P001, R001 Special packing provisions (ADR) : RR2 Mixed packing provisions (ADR) : MP19 Transport category (ADR) : 2 Special provisions for carriage - Operation (ADR) : S2, S20 Tunnel restriction code (ADR) : E EAC code : •2Y

Transport by sea

Special provisions (IMDG) : 26 Limited quantities (IMDG) : 1L Excepted quantities (IMDG) : E0 Packing instructions (IMDG) : P001 EmS-No. (Fire) : F-E EmS-No. (Spillage) : S-D Stowage category (IMDG) : A Flash point (IMDG) : 35°C c.c.

Properties and observations (IMDG) : Colourless liquid. Flashpoint: 35°C c.c. Explosive Limits: 7.1% to 63%. Miscible with water.

Fire and explosion hazard if package is ruptured.

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MFAG-No : 129

Air transport

PCA Excepted quantities (IATA) : E0 : Forbidden PCA Limited quantities (IATA) : Forbidden PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) : Forbidden : Forbidden PCA max net quantity (IATA) : 364 CAO packing instructions (IATA) : 60L CAO max net quantity (IATA) : A1. A39 Special provisions (IATA) ERG code (IATA) : 3L

Inland waterway transport

Classification code (ADN) : F1
Limited quantities (ADN) : 1 L
Excepted quantities (ADN) : E0
Equipment required (ADN) : PP, EX, A
Ventilation (ADN) : VE01
Number of blue cones/lights (ADN) : 1

Rail transport

Classification code (RID) : F1 Limited quantities (RID) : 1L Excepted quantities (RID) : E0 Packing instructions (RID) : P001, R001 Special packing provisions (RID) : RR2 Mixed packing provisions (RID) : MP19 Transport category (RID) : 2 Colis express (express parcels) (RID) : CE7 Hazard identification number (RID) : 33

14.7. Transport in bulk according to Annex II of Marpol 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

REACH Annex XVII (Restriction List)

No REACH Annex XVII restrictions

REACH Annex XIV (Authorisation List)

NITROMETHANE FOR SYNTHESIS is not on the REACH Annex XIV List

REACH Candidate List (SVHC)

NITROMETHANE FOR SYNTHESIS is not on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

NITROMETHANE FOR SYNTHESIS is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

NITROMETHANE FOR SYNTHESIS is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (1005/2009)

NITROMETHANE is not subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

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Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

15.1.2. National regulations

Germany

Water hazard class (WGK) : WGK 2, Significantly hazardous to water (Classification according to AwSV; ID No. 589).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed SZW-lijst van mutagene stoffen : The substance is not listed SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed SZW-lijst van reprotoxische stoffen – : The substance is not listed

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

Denmark

Class for fire hazard : Class II-1 Store unit : 5 liter

Classification remarks : R10 <H226;H302>; Emergency management guidelines for the storage of flammable liquids

must be followed

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
IATA	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	

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Abbreviations and acronyms:		
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
PBT	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	
VOC	Volatile Organic Compounds	
CAS-No.	Chemical Abstract Service number	
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disrupting properties	

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Flam. Liq. 3	Flammable liquids, Category 3
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.

Safety Data Sheet (SDS), EU

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.