NITROMETHANE FOR SYNTHESIS MSDS

CAS No: 75-52-5 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

:

EC index no : 609-036-00-7
EC no : 200-876-6
CAS No : 75-52-5
Product code : 04989

Chemical structure :

CH₃NO₂

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

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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Flammable liquids, H226

Category 3

Acute toxicity (oral), H302

Category 4

Full text of classification categories and H statements : see section 16

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Classification according to Directive 67/548/EEC or 1999/45/EC

Xn; R22 R5 R10

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) :





GHS02

. _

Signal word (CLP) : -

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

H302 - Harmful if swallowed

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Name : NITROMETHANE For Synthesis

CAS No : 75-52-5 EC no : 200-876-6 EC index no : 609-036-00-7

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

3.2. Mixture

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. Give oxygen or

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

First-aid measures after skin contact : Remove/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.

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

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

Symptoms/injuries 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.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

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.

5.3. Advice for firefighters

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

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 naked

lights. No smoking.

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.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : 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.

6.4. Reference to other sections

No additional information available

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.

Precautions for safe handling : No naked lights. No smoking. Take precautionary measures against static discharge.

Use only non-sparking tools. Keep away from sources of ignition - No smoking.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash ... thoroughly after

handling.

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.

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Incompatible materials : Heat sources.

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 : Liquid

Colour : Clear oily liquid.

Odour : disagreeable fruity odor.

Odour threshold : No data available

pH : 6.4 at 0,01 g/l at 20 °C

Relative evaporation rate (butylacetate=1) : 1.39

Melting point : -29 °C

Freezing point : No data available

Boiling point : 101.2 °C

Flash point : 36 °C

Auto-ignition temperature : 418 °C

Decomposition temperature : No data available

Flammability (solid, gas) : Flammable

Flammable liquid and vapour

Vapour pressure : 36.4 hPa at 20 °C

Relative vapour density at 20 °C : 2.11

Relative density : No data available

Density : 1.127 g/cm³

Solubility : Water: 100 g/l at 20 °C

Log Pow : 0.17

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Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

Explosive properties : Heating may cause an explosion.

Oxidising properties : No data available

Explosive limits : ≥ 0.073 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

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 additional information available

10.4. Conditions to avoid

Open flame. Overheating. Direct sunlight. Heat. Sparks.

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.

Skin corrosion/irritation : Not classified

pH: 6.4 at 0,01 g/l at 20 °C

Serious eye damage/irritation : Not classified

pH: 6.4 at 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 Specific target organ toxicity (single : Not classified

exposure)

Specific target organ toxicity (repeated : N

exposure)

: Not classified

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Aspiration hazard : Not classified

Potential adverse human health effects

and symptoms

: Harmful if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

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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

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 ...

Additional information

: Handle empty containers with care because residual vapours are flammable.

Hazardous waste due to potential risk of explosion.

SECTION 14: Transport information

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

14.1. UN number

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

14.2. UN proper shipping name

Proper Shipping Name (ADR) : NITROMETHANE
Proper Shipping Name (IMDG) : NITROMETHANE

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

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
Hazard labels (IATA) : 3



ADN

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



RID

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

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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 : No Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : F1
Limited quantities (ADR) : 1L
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 : S2, S20

(ADR)

Tunnel restriction code (ADR) : E
EAC code : •2Y

- Transport by sea

Special provision (IMDG) : 26 Limited quantities (IMDG) : 1 L Excepted quantities (IMDG) : E0 : P001 Packing instructions (IMDG) : F-E EmS-No. (Fire) EmS-No. (Spillage) : S-D Stowage category (IMDG) : A Flash point (IMDG) : 35°C c.c. MFAG-No : 129

- Air transport

PCA Excepted quantities (IATA) : E0

PCA Limited quantities (IATA) : Forbidden
PCA limited quantity max net quantity : Forbidden

(IATA)

PCA packing instructions (IATA) : Forbidden
PCA max net quantity (IATA) : Forbidden
CAO packing instructions (IATA) : 364
CAO max net quantity (IATA) : 60L
Special provision (IATA) : A1, A39
ERG code (IATA) : 3L

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- 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 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

NITROMETHANE For Synthesis is not on the REACH Candidate List NITROMETHANE For Synthesis is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) 2, hazardous to water (Classification according to

VwVwS, Annex 2; WGK No 589)

12th Ordinance Implementing the Federal

Immission Control Act - 12.BImSchV

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

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

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

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15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

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

<u> </u>	
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
R10	Flammable
R22	Harmful if swallowed
R5	Heating may cause an explosion
Xn	Harmful

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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