

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Nitromethane $\geq 98,5$ %, for synthesis

article number: **4406**
Version: **4.0 en**
Replaces version of: 2022-07-21
Version: (3)

date of compilation: 2019-05-21
Revision: 2024-03-02

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

1.1 Product identifier

Identification of the substance	Nitromethane $\geq 98,5$ %, for synthesis
Article number	4406
Index No (GB CLP)	609-036-00-7
EC number	200-876-6
CAS number	75-52-5

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

Relevant identified uses:	Isolated intermediate
Uses advised against:	Do not use for products which come into contact with foodstuffs. Do not use for private purposes (household). Food, drink and animal feeding-stuffs.

1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co. KG
Schoemperlenstr. 3-5
D-76185 Karlsruhe
Germany

Telephone: +49 (0) 721 - 56 06 0
Telefax: +49 (0) 721 - 56 06 149
e-mail: sicherheit@carlroth.de
Website: www.carlroth.de

Competent person responsible for the safety data sheet: Department Health, Safety and Environment

e-mail (competent person): sicherheit@carlroth.de

1.4 Emergency telephone number

Name	Street	Postal code/city	Telephone	Website
National Poisons Information Service City Hospital	Dudley Rd	B187QH Birmingham	844 892 0111	

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Nitromethane $\geq 98,5\%$, for synthesis

article number: 4406

Section	Hazard class	Cat-egory	Hazard class and category	Hazard statement
2.6	Flammable liquid	3	Flam. Liq. 3	H226
3.10	Acute toxicity (oral)	4	Acute Tox. 4	H302
3.11	Acute toxicity (inhal.)	4	Acute Tox. 4	H332
3.6	Carcinogenicity	2	Carc. 2	H351
3.7	Reproductive toxicity	2	Repr. 2	H361fd

For full text of abbreviations: see SECTION 16

The most important adverse physicochemical, human health and environmental effects

The product is combustible and can be ignited by potential ignition sources.

2.2 Label elements

Labelling

Signal word

Warning

Pictograms

GHS02, GHS07,
GHS08



Hazard statements

H226	Flammable liquid and vapour
H302+H332	Harmful if swallowed or if inhaled
H351	Suspected of causing cancer
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child

Precautionary statements

Precautionary statements - prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P260	Do not breathe mist/vapours
P280	Wear protective gloves/protective clothing/eye protection/face protection

Precautionary statements - response

P308+P313	IF exposed or concerned: Get medical advice/attention
-----------	---

For professional users only

2.3 Other hazards

Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Nitromethane $\geq 98,5\%$, for synthesis

article number: 4406

SECTION 3: Composition/information on ingredients

3.1 Substances

Name of substance	Nitromethane
Molecular formula	CH ₃ NO ₂
Molar mass	61,04 g/mol
CAS No	75-52-5
EC No	200-876-6
Index No (GB CLP)	609-036-00-7

Substance, Specific Conc. Limits, M-factors, ATE

Specific Conc. Limits	M-Factors	ATE	Exposure route
-	-	1.478 mg/kg 15 mg/l/4h	oral inhalation: vapour

SECTION 4: First aid measures

4.1 Description of first aid measures



General notes

Take off contaminated clothing.

Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

Following skin contact

Rinse skin with water/shower.

Following eye contact

Rinse cautiously with water for several minutes. In all cases of doubt, or when symptoms persist, seek medical advice.

Following ingestion

Rinse mouth with water (only if the person is conscious). In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

4.2 Most important symptoms and effects, both acute and delayed

Irritant effects, Diarrhoea, Nausea, Vomiting

4.3 Indication of any immediate medical attention and special treatment needed

none

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Nitromethane $\geq 98,5$ %, for synthesis

article number: 4406

SECTION 5: Firefighting measures

5.1 Extinguishing media



Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings!
water spray, alcohol resistant foam, dry extinguishing powder, BC-powder, carbon dioxide (CO₂)

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Combustible. In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture. Solvent vapours are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapours are heavier than air, spread along floors and form explosive mixtures with air. Vapours may form explosive mixtures with air.

Hazardous combustion products

In case of fire may be liberated: Nitrogen oxides (NO_x), Carbon monoxide (CO), Carbon dioxide (CO₂)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures



For non-emergency personnel

Use personal protective equipment as required. Avoid contact with skin, eyes and clothes. Do not breathe vapour/spray. Avoidance of ignition sources.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains.

Advice on how to clean up a spill

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Nitromethane $\geq 98,5\%$, for synthesis

article number: 4406

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provision of sufficient ventilation. Avoid exposure.

Measures to prevent fire as well as aerosol and dust generation



Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharge.

Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs. When using do not smoke.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed.

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice:

Ground/bond container and receiving equipment.

Ventilation requirements

Keep any substance that emits harmful vapours or gases in a place that allows these to be permanently extracted. Use local and general ventilation.

Specific designs for storage rooms or vessels

Recommended storage temperature: 15 – 25 °C

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m ³]	STEL [ppm]	STEL [mg/m ³]	Ceiling-C [ppm]	Ceiling-C [mg/m ³]	Notation	Source
GB	nitromethane	75-52-5	WEL	100	254	150	381				EH40/2005

Notation

Ceiling-C Ceiling value is a limit value above which exposure should not occur

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Nitromethane $\geq 98,5$ %, for synthesis

article number: 4406

Notation

STEL	Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)
TWA	Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

Human health values

Relevant DNELs and other threshold levels				
Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
DNEL	20 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
DNEL	39 mg/m ³	human, inhalatory	worker (industry)	acute - systemic effects
DNEL	39 mg/m ³	human, inhalatory	worker (industry)	chronic - local effects
DNEL	79 mg/m ³	human, inhalatory	worker (industry)	acute - local effects
DNEL	417 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
DNEL	2.500 mg/kg bw/day	human, dermal	worker (industry)	acute - systemic effects

Environmental values

Relevant PNECs and other threshold levels				
End-point	Threshold level	Organism	Environmental compartment	Exposure time
PNEC	4,9 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)

8.2 Exposure controls

Individual protection measures (personal protective equipment)

Eye/face protection



Use safety goggle with side protection.

Skin protection



• hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Nitromethane $\geq 98,5$ %, for synthesis

article number: 4406

a guide.

• type of material

Butyl caoutchouc (butyl rubber)

• material thickness

0,5 mm

• breakthrough times of the glove material

>480 minutes (permeation: level 6)

• other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Respiratory protection



Respiratory protection necessary at: Aerosol or mist formation. Type: A (against organic gases and vapours with a boiling point of > 65 °C , colour code: Brown).

Environmental exposure controls

Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Colour	colourless
Odour	characteristic
Melting point/freezing point	-28,4 °C (ECHA)
Boiling point or initial boiling point and boiling range	101,2 °C at 1.013 hPa
Flammability	flammable liquid in accordance with GHS criteria
Lower and upper explosion limit	180 g/m ³ (LEL) - 1.600 g/m ³ (UEL) / 7,3 vol% (LEL) - 63 vol% (UEL)
Flash point	36 °C at 1.013 hPa (c.c.)
Auto-ignition temperature	430 °C at 1.013 hPa (auto-ignition temperature (liquids and gases))
Decomposition temperature	not relevant
pH (value)	6,4 (in aqueous solution: 0,6 g/l, 20 °C)
Kinematic viscosity	0,5685 mm ² /s at 20 °C
Dynamic viscosity	0,647 mPa s at 20 °C
<u>Solubility(ies)</u>	
Water solubility	104,5 g/l at 25 °C (ECHA)

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Nitromethane $\geq 98,5$ %, for synthesis

article number: **4406**

Partition coefficient

Partition coefficient n-octanol/water (log value): -0,35 (exp.)

Vapour pressure 35,65 mmHg at 25 °C

Density and/or relative density

Density 1,138 g/cm³ at 20 °C

Relative vapour density 2,11 (air = 1)

Particle characteristics not relevant (liquid)

Other safety parameters

Oxidising properties none

9.2 Other information

Information with regard to physical hazard classes: There is no additional information.

Other safety characteristics:

Gas group (explosion group) IIA
Maximum Experimental Safe Gap value; MESG > 0,9 mm

Surface tension 73,6 mN/m (21 °C) (ECHA)

SECTION 10: Stability and reactivity

10.1 Reactivity

It's a reactive substance. Risk of ignition.

If heated

Risk of ignition. Vapours may form explosive mixtures with air.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

Violent reaction with: Acids, Bases, strong oxidiser, Acetone, Aldehydes, Alkali hydroxide (caustic alkali), Amines, Ammonia (NH₃), Ammonium hydroxide, Aniline, Chloroform, Halogenated hydrocarbons, Hydrazine, Hydrocarbons, Metal powder, Methanol, Perchlorates,
=> Explosive properties

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5 Incompatible materials

Rubber articles, different plastics

10.6 Hazardous decomposition products

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Nitromethane $\geq 98,5\%$, for synthesis

article number: 4406

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Classification acc. to GHS

Acute toxicity

Harmful if swallowed. Harmful if inhaled.

GHS of the United Nations, annex 4. May be harmful in contact with skin.

Acute toxicity					
Exposure route	Endpoint	Value	Species	Method	Source
oral	LD50	1.478 mg/kg	rat		ECHA
dermal	LD50	>2.000 mg/kg	rabbit		ECHA

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity

Suspected of damaging the unborn child. Suspected of damaging fertility.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics

• If swallowed

diarrhoea, vomiting, nausea

• If in eyes

causes slight to moderate irritation

• If inhaled

nausea, headache

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Nitromethane $\geq 98,5$ %, for synthesis

article number: 4406

- **If on skin**

Frequently or prolonged contact with skin may cause dermal irritation

- **Other information**

Other adverse effects: Liver and kidney damage, Methaemoglobinaemia

11.2 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

11.3 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute)				
Endpoint	Value	Species	Source	Exposure time
LC50	$>659,2 \text{ mg/l}$	fish	ECHA	96 h
EC50	$>103 \text{ mg/l}$	aquatic invertebrates	ECHA	48 h
ErC50	$>102 \text{ mg/l}$	algae	ECHA	72 h

12.2 Persistence and degradability

Theoretical Oxygen Demand (without nitrification): 0 mg/mg

Theoretical Oxygen Demand (with nitrification): $1,048 \text{ mg/mg}$

Theoretical Carbon Dioxide: $0,721 \text{ mg/mg}$

Process of degradability		
Process	Degradation rate	Time
biotic/abiotic	10 %	28 d
oxygen depletion	2,4 %	5 d
carbon dioxide generation	36,2 %	5 d

12.3 Bioaccumulative potential

Does not significantly accumulate in organisms.

n-octanol/water (log KOW)	-0,35 (Exp.)
---------------------------	--------------

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Nitromethane $\geq 98,5$ %, for synthesis

article number: **4406**

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

Sewage disposal-relevant information

Do not empty into drains.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Properties of waste which render it hazardous

HP 3 flammable
HP 6 acute toxicity
HP 7 carcinogenic
HP 10 toxic for reproduction

13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions. Non-contaminated packages may be recycled.

SECTION 14: Transport information

14.1 UN number or ID number

ADRRID	UN 1261
IMDG-Code	UN 1261
ICAO-TI	UN 1261

14.2 UN proper shipping name

ADRRID	NITROMETHANE
IMDG-Code	NITROMETHANE
ICAO-TI	Nitromethane

14.3 Transport hazard class(es)

ADRRID	3
IMDG-Code	3
ICAO-TI	3

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Nitromethane $\geq 98,5$ %, for synthesis

article number: 4406

14.4 Packing group

ADRRID	II
IMDG-Code	II
ICAO-TI	II

14.5 Environmental hazards

non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

14.8 Information for each of the UN Model Regulations

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) Additional information

Proper shipping name	NITROMETHANE
Particulars in the transport document	UN1261, NITROMETHANE, 3, II, (E)
Classification code	F1
Danger label(s)	3



Excepted quantities (EQ)	E0
Limited quantities (LQ)	1 L
Transport category (TC)	2
Tunnel restriction code (TRC)	E
Emergency Action Code	2Y

Regulations concerning the International Carriage of Dangerous Goods by Rail (RID) Additional information

Classification code	F1
Danger label(s)	3



Excepted quantities (EQ)	E0
Limited quantities (LQ)	1 L
Transport category (TC)	2
Hazard identification No	33

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Nitromethane ≥98,5 %, for synthesis

article number: 4406

International Maritime Dangerous Goods Code (IMDG) - Additional information

Proper shipping name	NITROMETHANE
Particulars in the shipper's declaration	UN1261, NITROMETHANE, 3, II, 36°C c.c.
Marine pollutant	-
Danger label(s)	3



International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Proper shipping name	Nitromethane
Particulars in the shipper's declaration	UN1261, Nitromethane, 3, II
Danger label(s)	3



SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

Seveso Directive

2012/18/EU (Seveso III)				
No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the application of lower and upper-tier requirements		Notes
P5c	flammable liquids (cat. 2, 3)	5.000	50.000	51)

Notation

51) Flammable liquids, categories 2 or 3 not covered by P5a and P5b

Deco-Paint Directive

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Nitromethane $\geq 98,5$ %, for synthesis

article number: 4406

VOC content	100 %
VOC content	1.138 g/l

Industrial Emissions Directive (IED)

VOC content	100 %
VOC content	1.138 g/l

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

not listed

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

not listed

Water Framework Directive (WFD)

List of pollutants (WFD)				
Name of substance	Name acc. to inventory	CAS No	Listed in	Remarks
Nitromethane	Substances and preparations, or the breakdown products of such, which have been proved to possess carcinogenic or mutagenic properties or properties which may affect steroidogenic, thyroid, reproduction or other endocrine-related functions in or via the aquatic environment		a)	

Legend

a) Indicative list of the main pollutants

Regulation on the marketing and use of explosives precursors

Explosives precursors which are subject to restrictions						
Name of substance	CAS No	Wt%	Type of registration	Re- marks	Limit value	Upper limit value for the pur- pose of licens- ing un- der Art- icle 5(3)
Nitromethane	75-52-5	100	Annex I		16 % w/w	100 % w/w

Legend

Annex I Substances which shall not be made available to members of the general public on their own, or in mixtures or substances including them, except if the concentration is equal to or lower than the limit values set out below

Additional statements

If the product is passed on to third parties, in accordance with Article 7 "Notification of the supply chain" of Regulation EU 2019/1148, the information obligation is subject to the entire supply chain and all other provisions mentioned in Article 7 on restricted and regulated raw materials.

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Nitromethane ≥98,5 %, for synthesis

article number: 4406

Regulation on drug precursors

not listed

Regulation on substances that deplete the ozone layer (ODS)

not listed

Regulation concerning the export and import of hazardous chemicals (PIC)

not listed

Regulation on persistent organic pollutants (POP)

not listed

National regulations(GB)

List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list

not listed

Restrictions according to GB REACH, Annex 17

Dangerous substances with restrictions (GB REACH, Annex 17)			
Name of substance	Name acc. to inventory	CAS No	No
Nitromethane	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC		3
Nitromethane	flammable / pyrophoric		40

Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

National inventories

Country	Inventory	Status
AU	AIIC	substance is listed
CA	DSL	substance is listed
CN	IECSC	substance is listed
EU	ECSI	substance is listed
EU	REACH Reg.	substance is listed
JP	CSCL-ENCS	substance is listed
KR	KECI	substance is listed
MX	INSQ	substance is listed
NZ	NZIoC	substance is listed
PH	PICCS	substance is listed
TW	TCSI	substance is listed
US	TSCA	substance is listed (ACTIVE)
VN	NCI	substance is listed

Legend

AIIC Australian Inventory of Industrial Chemicals
CSCL-ENCS List of Existing and New Chemical Substances (CSCL-ENCS)
DSL Domestic Substances List (DSL)

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Nitromethane $\geq 98,5$ %, for synthesis

article number: 4406

Legend

ECSI	EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
INSQ	National Inventory of Chemical Substances
KECI	Korea Existing Chemicals Inventory
NCI	National Chemical Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg.	REACH registered substances
TCSI	Taiwan Chemical Substance Inventory
TSCA	Toxic Substance Control Act

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
2.2		Hazard statements: change in the listing (table)	yes
2.3		Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.	yes
15.1	VOC content: 100 % 1.138 g/l	VOC content: 100 %	yes
15.1		VOC content: 1.138 g/l	yes
15.1		Explosives precursors which are subject to re- strictions: change in the listing (table)	yes
15.1		National inventories: change in the listing (table)	yes

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
ED	Endocrine disruptor

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Nitromethane $\geq 98,5$ %, for synthesis

article number: 4406

Abbr.	Descriptions of used abbreviations
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-licence/)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
ErC50	\equiv EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
GB CLP	The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/720 (as amended)
GB REACH	The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
LEL	Lower explosion limit (LEL)
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
STEL	Short-term exposure limit
TWA	Time-weighted average
UEL	Upper explosion limit (UEL)
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Nitromethane $\geq 98,5$ %, for synthesis

article number: **4406**

Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H332	Harmful if inhaled.
H351	Suspected of causing cancer.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.