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ESTD.1976 MULTI CHEM YOUR CHEMICAL PARTNER

SAFETY DATA SHEET

NITROMETHANE

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

1.1 Product identifier:	
CAS Number:	75-52-5
EC number:	200-873-7
1.2 SYNONYMS:	• Methyl nitrate • Nitromethyl • Nitromethane

SECTION 2: Hazards identification:

2.1 Classification of the substance or mixture:	Classification according to Regulation (EC) No 1272/2008 The substance is classified according to the CLP regulation.
2.2 Label elements:	Labelling according to Regulation (EC) No 1272/2008 Flammable liquids, (Category 3) Acute toxicity, Oral (Category 4) Acute toxicity, inhalation. (Category 4) Carcinogenicity, (Category 2) Reproductive toxicity, (Category 2)
Hazard Pictograms:	
Signal Word:	Danger
Hazard statements:	**H226:** Flammable liquid and vapor. **H302 + H332:** Harmful if swallowed or if inhaled. **H351:** Suspected of causing cancer. **H361d:** Suspected of damaging the unborn child.
Precautionary Statements:	**P202:** Do not handle until all safety precautions have been read and understood.

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	P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. **P233:** Keep container tightly closed. **P301 + P312:** IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. **P304 + P340 + P312:** IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. **P308 + P313:** IF exposed or concerned: Get medical advice/ attention.
2.3 Other hazards:	
Inhalation:	can cause respiratory irritation, dizziness, headaches, and in severe cases, central nervous system depression.
Ingestion:	can cause nausea, vomiting, abdominal pain, dizziness, and in severe cases, toxicity to the liver and kidneys.
Skin Contact:	can cause irritation, redness, and drying, and prolonged exposure may lead to chemical burns or dermatitis.
Eye contact:	can cause irritation, redness, pain, and potential damage to the cornea, leading to blurred vision.
Chronic Exposure:	may lead to nervous system damage, liver and kidney dysfunction, and increased risk of cancer due to its toxic and potentially carcinogenic properties.
Aggravation of pre-existing conditions:	may aggravate pre-existing respiratory conditions (such as asthma or bronchitis), liver and kidney diseases, or central nervous system disorders.

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SECTION 3: Composition/information on ingredients

3.1 Chemical characterisation:	Substances
CAS No:	Description: 75-52-5 NITROMETHANE
Identification number(s):	EC number: 200-873-7

SECTION 4: First aid measures

4.1 Description of first aid measures	
General information:	
After inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
After skin contact:	Remove contaminated clothing. Wash with soap and water. Consult a physician.
After eye contact:	Immediately flush eyes with plenty of water for at least 15 minutes. consult a physician.
After swallowing:	Rinse mouth with water. Immediately after ingestion. Never give anything by mouth to an unconscious person. Do not induce vomiting. Consult a physician.
4.2 Most important symptoms and effects, both acute and delayed:	Acute symptoms include respiratory irritation, dizziness, nausea, and headache, while delayed effects may involve liver and kidney damage, nervous system disorders, and potential carcinogenic effects with prolonged exposure.
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:	Carbon dioxide. Water spray. Alcohol-resistant foam.
5.2 Special hazards arising from the substance or mixture:	Carbon oxides, nitrogen oxides.
5.3 Advice for firefighters:	Wear fully protective suit, safety glasses and respiratory device. Cool tanks/drums with water spray/remove them into safety.
5.4 further information:	no data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:	Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Avoid dust accumulation. Seek medical attention.
6.2 Environmental precautions:	Do not enter this chemical into drains.
6.3 Methods and material for containment and cleaning up:	Take up spill into absorbent material, e.g.: sand, earth, vermiculite, powdered limestone. Scoop absorbed substance into closing containers. Spill must not return in its original container. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling:	For use in are with adequate ventilation. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material Do not use in confined spaces. Electrostatic discharge protection. Minimize dust generation and accumulation. Avoid ingestion and inhalation.
7.2 Conditions for safe storage, including any incompatibilities:	Store in original containers. Keep containers securely sealed Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Store in a dry and dark area.
Requirements to be met by storerooms and receptacles:	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
7.3 Specific end uses:	no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters	
Additional information about design of technical facilities:	A system of local and general exhaust is recommended.
8.2 Exposure controls	
Appropriate engineering controls	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Personal protective equipment:	Dust respirator, protective masks, wearing anti chemical gloves, rubber gloves, etc.

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General protective and hygienic measures:	Eyes, body and hand protection, maintain indoor air unobstructed. Wear protective equipment.
	Respiratory protection: Required.
Protection of hands:	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws. Wash and dry hands.
	Eye protection: Required
Protection of Body:	Complete suit protecting against chemicals, Flame retardant antistatic protective clothing.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties General Information	
Appearance: Form:	Oily Liquid
Colour:	Colourless
Odour:	Slightly sweet
pH-value:	7
Melting point/Melting range:	-29.5°C
Boiling point/Boiling range:	101.1°C
Flammability (solid, gaseous):	Highly Flammable
Ignition temperature:	390°C
Decomposition temperature:	200°C
Self-igniting:	None
Flash point:	6°C
Danger of explosion:	None
Explosion limits: Lower:	2.5%
Explosion limits: Upper:	36%
Vapour pressure:	3.4 kPa (at 20 °C)

Density at 20 °C:	1.132 g/cm³
Relative density:	1.132
Vapour density:	2.0
Evaporation rate:	Not determined
Solubility in / Miscibility with-·water at 20 °C:	Soluble
Partition coefficient:(n-octanol/water)	0.35
Viscosity:	0.37 cP at 20°C

SECTION 10: Stability and reactivity

10.1 Reactivity	No reaction under normal conditions.
10.2 Chemical stability	This chemical is stable under storage conditions.
10.3 Possibility of hazardous reactions	Can cause Hazardous reactions when comes into contact with strong acids, strong bases, or oxidizing agents.
10.4 Conditions to avoid	Heat, flame, sparks, shocks.
10.5 Incompatible materials	Strong oxidizing agents, strong acids and bases, strong reducing agents.
10.6 Hazardous decomposition products	Nitrogen oxides, carbon oxides.

SECTION 11: Toxicological information

11.1 Information on toxicological effects	
Acute Toxicity:	**LD50** (Oral, Rat): 1.478 mg/kg **LD50** (Dermal, Rabbit): 2.000 mg/kg **LC50** (Inhalation Rat): 14.34 mg/l (4hr)
Skin corrosion/Irritation:	No data available
Serious eye damage/irritation:	No data available

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Respiratory damage/irritation:	No data available
Ingestion:	No data available
Germ cell mutagenicity:	No data available
Carcinogenicity:	Suspected of causing cancer
Reproductive toxicity:	Suspected of damaging the unborn child
Specific target organ toxicity - single exposure:	No data available
Specific target organ toxicity - repeated exposure:	No data available
Aspiration hazard:	No data available
Signs and Symptoms of Exposure:	Refer section 2.3
11.2 Additional toxicological information	
Biodegradability:	Not Biodegradable

SECTION 12: Ecological information

12.1 Toxicity **Aquatic toxicity:**	LC50(fish): 659 mg/l (96 hr) EC50(daphnia): 103 mg/l (48 hr) ErC50(algae): 102 mg/l (72 hr)
12.2 Persistence and degradability:	Not Biodegradable
12.3 Bioaccumulative potential:	low bioaccumulative
12.4 Mobility in soil:	High mobility
12.5 Other adverse effects:	No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods	
Uncleaned packaging **Recommendation:**	dispose of in accordance with local hazardous waste regulations
Recommended cleansing agents:	Soapy Water, Isopropyl alcohol, acetone, activated carbon.

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SECTION 14: Transport information

14.1 UN-Number · ADR, ADN, IMDG, IATA:	1261
14.2 UN proper shipping name · ADR, ADN, IMDG, IATA:	NITROMETHANE
14.3 Transport hazard class(es) · ADR, ADN, IMDG, IATA :	3
14.4 Packing group · ADR, IMDG, IATA:	2
14.5 Environmental hazards:	None
14.6 Special precautions for user:	Handle responsibly.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Directive 2012/18/EU	Directive 2012/18/EU, under that this substance is classified in listed substance as flammable liquid.
Named dangerous substances:	This substance is not listed in the annex 1 to the directive.
15.2 Chemical safety assessment:	Chemical assessment has not been carried out.

SECTION 16: Other information

The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.