

Revision: 1.1

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Section 1. Identification

1.1 Product Identifier 1403

Product Name DIMETHYL SULPHOXIDE A.R.

CAS Number 67-68-5

REACH Registration No 01-2119431362-50-XXXX

Molecular Formula $\text{CH}_3\text{SOCH}_3 = 78.13$

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

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Vickers Laboratories Ltd



Grangefield Industrial Estate
Richardshaw Road
Pudsey
West Yorkshire
LS28 6QW
UNITED KINGDOM

Phone 44 0113 2362811

Fax +44(0)113 2362703

Email safety@viclabs.co.uk

Website www.viclabs.co.uk

1.4 Emergency Telephone (08:00-16:30) +44(0) 113 2362811 (24hr) 112 (Have this document to hand)

Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Not classified as hazardous.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Not classified as hazardous.

Section 3. Composition

3.1 Substances

Not classified as hazardous.

Section 4. First Aid

4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION.
Skin	Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use.
Inhalation	Remove from exposure. Keep warm and at rest. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation.
Ingestion	If conscious give plenty of water to drink. Do not induce vomiting.
Personal protection for first aiders	Wear protective gloves / eye protection.

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

No further relevant information available.

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

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media	Water spray, foam, dry powder or carbon dioxide.
Unsuitable Media	Nothing specified.

5.2 Special hazards arising from the substance or mixture

Hazards	Presents no specific fire danger.
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5.3 Advice for firefighters

Advice for firefighters	Consider all other materials in the vicinity.
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Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	Avoid breathing vapour. Use approved personal protective equipment.
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6.2 Environmental precautions

Environmental	Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.
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6.3 Methods and material for containment and cleaning up

Major Spillage	Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with copious amounts of water.
Minor Spillage	Contain and absorb on inert material. Transfer absorbent to container for removal. Allow solvent to evaporate in remote area, then dispose of absorbent as solid chemical waste. Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

Keep away from sources of ignition. All transfer systems should be earthed to prevent accumulation of static electricity.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage . Keep containers closed when not in use.

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Exposure data source(s) No hazardous components.

8.2 Exposure controls

Respiratory Protection Use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge organic vapour respirator, or use self contained breathing apparatus.

Hand Protection Use solvent resistant gloves.

Eye Protection Use tightly fitting chemical splash proof glasses or goggles.

Skin Protection Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.

Special Hazards No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance Clear colourless liquid.

Odour No specific odour.

pH Not applicable

Boiling Point 189 °C

Melting Point 18.5 °C

Flash Point 87°C (Closed cup)

Upper Flammable Limit 28.5%

Lower Flammable Limit 2.6%

Auto Ignition 301°C

Explosive Properties No.

Oxidising Properties No.

Vapour Pressure 0.56 hPa @ 20 °C

Relative Density 1.1000

Water Solubility Completely miscible in water.

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1 Reactivity No data available.

10.2 Chemical Stability Stable under normal conditions

10.3 Possibility of hazardous reactions No data available.

10.4 Conditions to Avoid No specific conditions.

10.5 Incompatible Materials Acid chlorides, phosphorous halides, strong acids, strong oxidising agents, strong reducing agents.

10.6 Hazardous Decomposition Products Burning may produce carbon monoxide, carbon dioxide and sulphur dioxide.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes Both the vapour and liquid may, produce conjunctival irritation and corneal damage.

Skin Unlikely to be an irritant on brief or occasional exposure. Repeated or prolonged contact may defat the skin producing irritation and dermatitis. Unlikely to be absorbed across the skin in harmful amounts.

LD50 Skin ~50000mg/kg Mouse

Ingestion Low order of acute toxicity. Ingestion of large amounts will produce gastrointestinal irritation. and central nervous system depression, leading to unconsciousness. Aspiration during swallowing or vomiting may injure lungs.

LD50 Oral 28300 mg/Kg Rat

Inhalation	Exposure to vapour concentrations above the occupational exposure limits will produce irritation of the eyes and respiratory tract. High concentrations of vapour may produce central nervous system depression and unconsciousness.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	Exposure of pregnant women to 30mg/m ³ and 300 mg/m ³ produced embryotropic effects ranging from high lipid values to embryotoxic effects respectively.

Section 12. Ecological

12.1 Toxicity	Readily biodegradable in the environment. 76% degraded after 10 days in fresh water.
LC50 Algal	17 g/L Algae (72 hours)
LC50 Crustacea	24.6 g/L Daphnia magna (48 hours)
LC50 Fish	>25 g/L Fish (96 hours)
12.2 Persistence and degradability	No data available.
12.3 Bioaccumulative potential	No data available.
12.4 Mobility in soil	No data available.
12.5 Results of PBT & vPvB assessment	Assessment not required.
12.6 Other adverse effects	None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods	Dispose of in a licensed incinerator for organic solvents. Do not dispose of as domestic waste. Never dispose of into water courses or sewerage systems due to high risk of explosion.
Contaminated Packaging	Use a licensed waste disposer. Do not attempt to burn any residual liquids due to risk of explosion.

Section 14. Transport Information

14.1 UN Number	Non-restricted
14.2 Proper Shipping Name	Non-restricted
14.3 Transport classes	
UN classification	None
Subsidiary hazard(s)	None
Transport category	None
ADR Hazard ID	Non-restricted
Tunnel Restriction Code	Non-restricted
14.4 Packing Group	None
14.5 Environment hazards	See section 12.
14.6 Special precautions for user	No special precautions required.
14.7 Transport in bulk	Not transported in bulk.

Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for substance/mixture.

Not classified as hazardous under Classification, Labelling & Packaging of Substances & Mixtures Regulations (1272/2008/CE).

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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