

Dimethylacetamide

SECTION 1. IDENTIFICATION

Product Identifier	Dimethylacetamide
Other Means of Identification	Acetyldimethylamine, DMAC
Product Code(s)	DI3810, DI3850
Product Family	Organic liquid
Recommended Use	Laboratory and industrial use.
Restrictions on Use	None known.
Supplier Identifier	Alphachem Limited, 2485 Milltower Court, Mississauga, Ontario, L5N 5Z6, (905) 821-2995
Emergency Phone No.	CANUTEC CANADA, 613-996-6666, 24 Hours
SDS No.	1411

SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the US Hazard Communication Standard (HCS 2012).

Classification

Flammable liquid - Category 4; Acute toxicity (Dermal) - Category 4; Acute toxicity (Inhalation) - Category 4; Eye irritation - Category 2; Reproductive toxicity - Category 1B

Label Elements



Signal Word:
Danger

Hazard Statement(s):

Combustible liquid.
Harmful in contact with skin or if inhaled.
Causes serious eye irritation.
May damage the unborn child.

Precautionary Statement(s):

Prevention:
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Use only outdoors or in a well-ventilated area.
Wash hands and skin thoroughly after handling.

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Wear protective gloves/protective clothing/eye protection/face protection.

Response:

IF ON SKIN: Wash with plenty of water.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical advice or attention.

Call a POISON CENTRE or doctor if you feel unwell.

Storage:

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Disposal:

Dispose of contents and container in accordance with local, regional, national and international regulations.

Other Hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
N,N-Dimethylacetamide	127-19-5	> 99	Acetyl dimethylamine, DMAC	

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Move to fresh air. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by Poison Centre or doctor. Avoid mouth-to-mouth contact by using a barrier device. If breathing has stopped, trained personnel should begin rescue breathing. Get immediate medical advice or attention.

Skin Contact

Immediately rinse with lukewarm, gently flowing water for 15-20 minutes. If skin irritation occurs, get medical advice or attention.

Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Contact physician immediately.

Ingestion

Do not induce vomiting. Immediately call a Poison Centre or doctor.

First-aid Comments

Treat symptomatically. Symptoms may be delayed. Provide general supportive measures (comfort, warmth, rest). Do not leave the victim unattended.

Most Important Symptoms and Effects, Acute and Delayed

None known.

Immediate Medical Attention and Special Treatment

Special Instructions

General advice, consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

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Suitable Extinguishing Media

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog. Special "alcohol resistant fire-fighting foams".

Unsuitable Extinguishing Media

None known.

Specific Hazards Arising from the Product

Heating increases the release of toxic vapour. Closed containers may rupture violently when heated releasing contents.

In a fire, the following hazardous materials may be generated: very toxic carbon monoxide, carbon dioxide; corrosive, oxidizing nitrogen oxides.

Special Protective Equipment and Precautions for Fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full

protective gear.

Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet. Do not touch damaged containers or spilled product unless wearing appropriate protective equipment. Increase ventilation to area or move leaking container to a well-ventilated and secure area. Remove or isolate incompatible materials as well as other hazardous materials.

Environmental Precautions

It is good practice to prevent releases into the environment. Do not allow into any sewer, on the ground or into any waterway.

Methods and Materials for Containment and Cleaning Up

Contain and soak up spill with absorbent that does not react with spilled product. (e.g.: dry sand/earth/vermiculite). Place used absorbent into suitable, covered, labelled containers for disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Wear personal protective equipment to avoid direct contact with this chemical. Eliminate heat and ignition sources such as sparks, open flames, hot surfaces and static discharge. Post "No Smoking" signs. Only use where there is adequate ventilation. Prevent accidental contact with incompatible chemicals. Wash hands thoroughly after handling this product and before eating, using the washroom or leaving work area.

Conditions for Safe Storage

Store in an area that is: cool, dry, well-ventilated, out of direct sunlight and away from heat and ignition sources, separate from incompatible materials (see Section 10: Stability and Reactivity). Store in a closed container.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
N,N-Dimethylacetamide	10 ppm A4		10 ppm			

*NOTICE OF INTENDED CHANGE: ACGIH has published a Notice of Intended Change which retains the TLV-TWA to 10 ppm with a Skin notation and revises the Carcinogenicity designation to A3 with a TLV Basis of Liver, embryo and fetal damage, reproductive effects and central nervous system (CNS) impairment.

A4 = Not classifiable as a human carcinogen.

Appropriate Engineering Controls

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Use local exhaust ventilation and enclosure, if necessary, to control amount in the air. Ensure that eyewash stations and safety showers are close to the workstation location. Use a corrosion-resistant exhaust ventilation system separate from other ventilation systems.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

Suitable materials are: butyl rubber, Barrier® (PE/PA/PE), Frontline® 500, Microchem® 4000, Tychem® CPR 3, Tychem® F, Tychem® ThermoPro, Tychem® BR/LV, Tychem® Responder® CSM, Tychem® TK, Tychem® Reflector, Zytron® 300, Zytron® 500.

The following materials should NOT be used: natural rubber, neoprene rubber, polyvinyl alcohol, polyvinyl chloride, Viton®.

Respiratory Protection

For non-routine or emergency situations: follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Colourless liquid.
Odour	Fishy
Odour Threshold	Not available
pH	Not available
Melting Point/Freezing Point	-20 °C (-4 °F) (melting); -20 °C (-4 °F) (freezing)
Initial Boiling Point/Range	166 °C (331 °F)
Flash Point	70 °C (158 °F) (open cup)
Evaporation Rate	172 (diethyl ether = 1)
Flammability (solid, gas)	Not applicable
Upper/Lower Flammability or Explosive Limit	11.5% (upper); 1.8% (lower)
Vapour Pressure	0.27 kPa (2.03 mm Hg)
Vapour Density (air = 1)	3.01
Relative Density (water = 1)	0.9429 at 20 °C
Solubility	Soluble in all proportions in water; Soluble in all proportions in ketones (e.g. acetone).
Partition Coefficient, n-Octanol/Water (Log Kow)	-0.77
Auto-ignition Temperature	490 °C (914 °F)
Decomposition Temperature	Not available
Viscosity	Not available (kinematic); 0.95 mPa.s at 25 °C (dynamic)
Other Information	
Physical State	Liquid
Molecular Weight	87.12

SECTION 10. STABILITY AND REACTIVITY

Reactivity

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None known.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

Hazardous polymerization does not occur.

Conditions to Avoid

Incompatible materials. Open flames, sparks, static discharge, heat and other ignition sources. Moisture.

Incompatible Materials

Strong oxidizing agents (e.g. perchloric acid), strong acids (e.g. hydrochloric acid), aldehydes (e.g. acetaldehyde).

Hazardous Decomposition Products

Very toxic carbon monoxide, carbon dioxide; corrosive, oxidizing nitrogen oxides.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
N,N-Dimethylacetamide	2475 mg/L (rat) (1-hour exposure)	4300 mg/kg (rat)	> 2112 mg/kg (rabbit)

Skin Corrosion/Irritation

Animal tests show mild irritation.

Serious Eye Damage/Irritation

Animal tests show serious eye irritation.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

No information was located.

Ingestion

No information was located.

Aspiration Hazard

No information was located.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

No information was located.

Respiratory and/or Skin Sensitization

No information was located.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
N,N-Dimethylacetamide	Not Listed	A4	Not Listed	Not Listed

A4 – Not classifiable as a human carcinogen.

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Reproductive Toxicity

Development of Offspring

May harm the unborn child.

Sexual Function and Fertility

May cause effects on sexual function and/or fertility.

Effects on or via Lactation

No information was located.

Germ Cell Mutagenicity

No information was located.

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION

This section is not required by WHMIS. This section is not required by OSHA HCS 2012.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of contents and container in accordance with local, regional, national and international regulations.

SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations.

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

Listed on the DSL.

USA

Toxic Substances Control Act (TSCA) Section 8(b)

Listed on the TSCA Inventory.

SECTION 16. OTHER INFORMATION

NFPA Rating **Health - 2** **Flammability - 2** **Instability - 0**

SDS Prepared By Alphachem Limited

Phone No. (905)-821-2995

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References CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). Registry of Toxic Effects of Chemical Substances (RTECS®) database. Dassault Systèmes/BIOVIA ("BIOVIA"). Available from Canadian Centre for Occupational Health and Safety (CCOHS).

Disclaimer This document is offered only as a guide in the safe handling of the above product, and has been prepared from the best information currently available. It is not intended to be

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all-inclusive and the conditions of use may involve other additional considerations. Since Alphachem Limited cannot anticipate or control the conditions under which the product may be used, it will not be liable for any claims, damages or losses which may result from the use or reliance on any information herein.

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