



SAFETY DATA SHEET

1. Identification

Product Identifier: Stiricide DMDMH Other Identifiers: None

Recommended use: Preservative for cosmetic formulations

Supplier: Stirling Chemicals Inc. Telephone: 905 362 1177
221 Wilkinson Road,
Brampton, ON
L6T 4M2 Emergency Phone: 613 996 6666

2. Hazard Identification

WHMIS Class D2A – contains formaldehyde which is a human carcinogen
D2B – skin and eye irritant

GHS Classification:

Eye Irritation – Category 2A
Skin Irritation – Category 2
Skin Sensitizer – Category 1
Carcinogenic – Category 2
Specific Target Organ – Single Exposure
Category 3 Respiratory Irritation



WARNING: Causes serious eye and skin irritation. May cause an allergic skin reaction.
Suspected of causing cancer. May cause respiratory irritation.

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use in a well-ventilated area. Avoid breathing mist, vapours, or spray. Wash hands thoroughly after handling. Wear protective gloves and safety glasses or face shield.

Response

If exposed or concerned get medical advice.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists get medical attention.

IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs get medical attention.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical attention if you feel unwell.

Take off contaminated clothing and wash it before re-use.

2. Hazards Identification cont'd**Storage**

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

Disposal

Dispose of contents/container to a licensed waste facility in accordance with local, provincial or state, and federal regulations

3. Composition & Information on Ingredients

Component	CAS #	%
1,3 bis(hydroxymethyl)5,5-dimethylhydantoin	6440-58-0	50 - 60
Water	7732-18-5	44 – 46
Formaldehyde	50-00-0	<2

4. First Aid Measures

Eyes Immediately flush eyes with plenty of water for at least 15 minutes. Hold eyelids open to ensure adequate flushing. Remove contact lenses if present and easy to do. Continue flushing. If irritation persists get medical attention.

Skin Flush with plenty of water. Obtain medical attention if irritation develops. Remove contaminated clothing and wash separately before reuse.

Inhalation: If respiratory irritation develops remove to fresh air. If difficulty breathing, give oxygen and get medical attention. If not breathing apply artificial respiration and get medical attention.

Ingestion: Do NOT induce vomiting. Do not give anything to an unconscious person. If conscious wash mouth out and then give 1 – 2 glasses of water to drink Get medical aid. Vomiting may occur spontaneously – lay victim on side to avoid aspiration of swallowed product.

5. Fire Fighting Measures

Extinguishing Media: Does not burn. Use media suitable for surrounding fire, such as water spray, dry chemical, foam.

Hazards arising from chemical: Toxic, flammable formaldehyde gas may be produced in a fire or by heating. Produces oxides of carbon and nitrogen.

5. Fire Fighting Measures cont'd

Protection of Firefighters: Wear self contained breathing apparatus (SCBA) and full protective clothing. Keep unopened containers cool with water spray. Closed containers may explode when exposed to high temperatures.

6. Accidental Release Measures

Personal Precautions: Avoid contact with spilled material. Wear respirator with formaldehyde/organic vapour cartridge or self-contained breathing apparatus, chemical resistant gloves and protective clothing including footwear. Isolate spill area. Keep unnecessary people away. Approach spill from upwind.

Environmental Precautions Prevent further leakage if safe to do so. Keep material out of drains, water courses and confined areas.

Spill clean-up: Absorb small spills with inert material. Dike and contain large spills for disposal.

7. Handling and Storage

Handling: Avoid contact. Keep container closed when not in use. Wash hands after handling. Do not eat, drink, or smoke in work areas.

Storage: Protect from freezing. Keep above 15°C and below 35°C. Keep away from flames and sparks. Store away from acids. Product will freeze below 0°C. Avoid overheating.

8. Exposure Controls/Personal Protection

Exposure Limits:	Formaldehyde	TLV – TWA (ACGIH)	0.3 ppm
		STEL (Ont)	1 ppm
		Ceiling (Ont)	1.5 ppm

Dimethylol-5,5-dimethylhydantoin Not established

Engineering Controls: Use general ventilation. Local exhaust suggested for enclosed spaces.

Emergency shower and eyewash stations should be readily accessible in the work area.

8. Exposure Controls/Personal Protection**Personal Protective Equipment:**

Eye/Face:	Wear safety glasses or chemical splash goggles.
Skin:	Wear protective clothing and chemical resistant gloves – nitrile rubber recommended.
Respiratory:	If ventilation is inadequate wear approved respirator with formaldehyde/organic vapour cartridge. Any respirator should be properly fit tested before use. SCBA must be used in oxygen deficient atmospheres.

9. Physical & Chemical Properties

Physical State:	Liquid
Colour:	Clear colourless
Odour:	Slight formaldehyde
Melting/Freezing Point:	-10°C
(Initial) Boiling Point (& range)	Not available
Flammability:	Not flammable
Upper/Lower Flammability Limits:	Not applicable
Flash Point:	>100 °C
Autoignition Temperature:	Not applicable
Decomposition Temperature:	Not available
pH:	6.5 - 7.5
Kinematic Viscosity:	Not available
Solubility (in water):	Completely miscible
Partition Coefficient (Octanol/water):	Not available
Vapour Pressure:	Not available
Density and relative density:	1.16
Relative Vapour Density (Air = 1):	Not available
Particle Characteristics:	Not available

10. Stability and Reactivity

Reactivity:	No Data
Stability:	Stable under normal storage and handling conditions.
Hazardous Reactions:	None known
Conditions to Avoid:	No data
Incompatible Materials:	Strong acids, strong bases
Hazardous Decomposition Products:	Formaldehyde, oxides of nitrogen and carbon

11. Toxicological Information**Acute Toxicity**

LD ₅₀ (oral) (rat)	3300mg/kg
LC ₅₀ (4hr) (rat)	>5mg/l
Skin irritation	non-irritating
Eye irritation	moderately irritating

Chronic Toxicity

This product contains formaldehyde which has been shown to cause nasal cancers in rats and is listed as a human carcinogen by IARC, OSHA and ACGIH.

There is some evidence that formaldehyde may cause harmful reproductive effects.

Formaldehyde may cause skin sensitization.

12. Ecological Information

Toxic to aquatic life.

EC₅₀ 37 ppml/96hr, *Daphnia magna* Effect: intoxication, immobilization

EC₅₀ 173 ppml/96hr, *Lepomis macrochirus* (Bluegill)

EC₅₀ 514 ppml/96hr, *Onchorhynchus mykiss* (Rainbow trout)

Product is readily biodegradable

13. Disposal Considerations

Dispose of in accordance with applicable municipal, provincial, state, or national regulations.

14. Transportation Information**TDG**

Not regulated

US DOT

RQ UN3082 Environmentally Hazardous Substance NOS (Formaldehyde) Class 9 PGIII
(when RQ exceeded approx 3500 kg)

ICAO/IATA

Not regulated

IMDG

Not regulated

15. Regulatory Information**Inventory Status**

Australia	Australia Inventory of Chemical Substances	Yes
Canada	Domestic Substances List	Yes
Canada	Non-Domestic Substances List	No
Europe	European Inventory of New and Existing Chemicals	Yes
Europe	European List of Notified Chemical Substances	No
New Zealand	New Zealand Inventory	Yes
United States	Toxic Substances Control Act Inventory	Yes

US CERCLA RQ

Formaldehyde 45.4 kg (100lb) represents approximately 3500 kg Stiricide DMDMH

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16. Other Information

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Product Regulations (CPR), and this MSDS contains all the information required by the CPR.

HMIS ratings	Health	*2
	Flammability	1
	Physical Hazard	0
	Personal Protection	C

Issue Date:	31 July 2025	Supersedes:	9 May 2024
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Disclaimer

The information contained in this SDS is intended to act as a guide for the safe handling of this specific product, and may not be valid when the material is used in combination with other material(s). The information provided is correct to the best of our knowledge. Nothing included in this SDS is intended to be construed as a product specification, warranty or imply fitness for a particular purpose.