

Material Safety Data Sheet

Surety Laboratories Inc. 6 Pearl Court Allendale, NJ 07401 T: 201.661.7161. F: 201.785.3915 www.suretylabs.com	FOR MSDS INFORMATION: (201) 661-7161 24-HOUR EMERGENCY TELEPHONE NUMBER CHEMTREC (800) 424-9300	Surcide DMDMH <hr/> Effective Date: 09/03/08 Replaces: 04/17/02 Page 1 of 6
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1. Product and Company Identification

SURCIDE DMDMH		Product Code:	SY0006
Principal Use:	Cosmetic preservative		
Description:	Liquid broad-spectrum antimicrobial agent		

2. Composition/Information on Ingredients

<u>Ingredients</u>	<u>%(w/w)</u>	<u>OSHA PEL</u>
1,3-dihydroxymethyl-5,5-dimethylhydantoin (CAS 6440-58-0)	55	Not listed
Formaldehyde (CAS 50-00-0)	1	0.75ppm
Water (CAS 7732-18-5)	44	Not listed

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

3. Hazards Identification

Emergency Overview

Appearance:
Clear liquid

Physical Hazards:
None

Health Hazards:
Irritant (skin, eye and respiratory passages). Based on formaldehyde – Sensitizer (skin and respiratory system). Toxic (inhalation, skin absorption). Potential cancer hazard (animal carcinogen).

Potential Health Effects:

General:
This health hazard assessment is based on information from commercial and scientific literature.

Ingestion:
The acute oral LD50 in rat is reported to be 3300 mg/kg. Relative to other materials, this product is classified as “non-toxic” by ingestion.

Eye Contact:
This material causes mild eye irritation.

Skin Contact:
Repeated and/or prolonged contact can cause skin irritation. See Section 11, Toxicological Information, for information on formaldehyde, a component of this product.

Skin Absorption:
This product can be absorbed through human skin. The acute dermal LD50 in rabbit for formaldehyde is reported to be 270 mg/kg.

Inhalation:
Vapors and aerosols will probably irritate respiratory passages. See Section 11, Toxicological Information, for information on formaldehyde, a component of this product.

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4. First Aid Measures:

First Aid – Eyes:

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Have eyes examined and treated by medical personnel.

First Aid – Skin:

Remove contaminated clothing and footwear. Wash material off skin with plenty of soap and water. If redness, itching or a burning sensation develops, get medical attention. Wash contaminated clothing and decontaminate footwear before reuse.

First Aid – Ingestion:

Do not induce vomiting. Give 1 or 2 glasses of water to drink and refer person to medical personnel. Never give anything by mouth to an unconscious person.

First Aid – Inhalation:

Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is labored, give oxygen. Consult medical personnel.

5. Fire Fighting Measures

Flashpoint and Method:

>200⁰ F

Autoignition Temperature:

Not applicable

Flammable Limits:

Not applicable

General Hazards:

Combustion conditions may produce noxious and irritating gases, which will require fresh air.

Fire Fighting Instructions:

Extinguishing media are carbon dioxide, foam, dry chemical, or water.

Fire Fighting Equipment:

Self-contained breathing apparatus with full face-piece and protective clothing.

Hazardous Combustion Products:

May produce carbon dioxide, carbon monoxide, nitrogen, ammonia and nitrogen oxide.

6. Accidental Release Measures

Spill Measures:

Wear skin, eye and respiratory protection during cleanup. Caution: Floors may become slippery. Soak up material with absorbent and shovel into a chemical waste container. Wash residue from spill area with water and flush to sewer serviced by a wastewater treatment facility.

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7. Handling and Storage

Handling:

Prevent skin and eye contact. Observe OSHA PEL limitations. Avoid breathing vapors or aerosols. Workers should shower and change to fresh clothing after each shift.

Storage:

Protect from frost. Avoid storing below 60⁰ F to protect from crystallization. Do not store near heat.

8. Exposure Controls/Personal Protection

Exposure Guidelines:

No ACGIH TLV or OSHA PEL is assigned to this mixture. Formaldehyde is listed by ACGIH as a suspected carcinogen in man. The ACGIH Short Term Exposure Limit (STEL) for formaldehyde is 0.3 ppm 8-hour TWA with a skin notation. The OSHA Permissible Exposure Limit (PEL) for formaldehyde is 0.75 ppm 8-hour TWA and a Short Term Exposure Limit (STEL) of 2 ppm. Consult OSHA standard, 29 CFR 1910.1048 for details.

Engineering Controls:

Use ventilation adequate to maintain safe levels. Provide eyewash station and safety shower in work area.

Respiratory Protection:

If needed, use MSHA-NIOSH approved respirator for formaldehyde with an end of service life indicator. Consult 29 CFR 1910.1048 for specific details concerning canister or cartridge service life, fit testing, training and end use restrictions. See especially Table 5 of the standard.

Protective Clothing:

Take all precautions to prevent skin contact. Use gloves, arm covers and apron determined to be impervious under conditions of use. Work clothes should be disposable or should be laundered daily. Additional precautions such as full body suit are mandatory for airborne concentrations of formaldehyde in excess of 100 ppm. Consult 29 CFR 1910.1048 for details.

Eye Protection:

Chemical tight goggles.

9. Chemical and Physical Properties

Appearance:	White Liquid
Boiling Point:	No data
Vapor Pressure:	No data
Vapor Density:	No data
Solubility in Water:	Soluble
pH:	6.5 – 7.5
Specific Gravity:	1.16 @ 25 ⁰ C
% Volatile:	>40

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10. Stability and Reactivity

Stability:

Stable under normal conditions.

Incompatibility:

Avoid contamination with strong alkalis or mineral acids.

Hazardous Decomposition Products:

Possible combustion products are carbon monoxide, carbon dioxide, nitrogen, ammonia and nitrogen oxide.

Hazardous Polymerization:

Will not occur.

11. Toxicological Information

Possible Human Health Effects:

Inhalation:

Vapors and aerosols will probably irritate respiratory passages. The formaldehyde component can be highly irritating in some individuals to the upper respiratory tract and eyes at atmospheric concentrations between 0.5 – 2.0 ppm. Some persons have developed asthma or bronchitis following a single exposure to a high concentration of formaldehyde. Tissue damage is likely to develop at levels between 25 to 50 ppm. A high concentration of formaldehyde is immediately dangerous to life and health.

Skin Contact:

Repeated and/or prolonged contact can cause skin irritation. Formaldehyde, a component of this preparation, can induce skin sensitization. Skin sensitization (allergic contact dermatitis) may develop after repeated and/or prolonged contact with human skin. Exposure to formaldehyde gas can provoke skin reactions in sensitized individuals.

Eye Contact:

This material causes mild eye irritation.

Ingestion:

The acute oral LD50 in rat is reported to be 3300 mg/kg. Relative to other materials, this product is classified as “non-toxic” by ingestion.

Other Effects of Overexposure:

According to OSHA 29 CFR 1910.1048, the formaldehyde component of this material is a potential cancer hazard to humans. Repeated or prolonged exposure increases the risk. Several animal studies show formaldehyde to be carcinogenic in rats. In humans, formaldehyde exposure is associated with cancers of the lungs, nasopharynx, oropharynx and nasal passages. Prolonged or repeated exposure is associated with respiratory impairment. Because exposure potential is a critical element in the expression of a potential hazard, this product, if handled in accordance with good industrial hygiene practice, will not present an actual hazard in the workplace.

Note to Physician:

Probable mucosal damage may contraindicate the use of gastric lavage following ingestion.

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12. Ecological Information

No environmental safety test data are available on this product. The following data were obtained from tests with a very similar product:

Mallard duck 8-day dietary LC50:	>5,000 ppm
Bobwhite quail 8-day dietary LC50:	>5,000 ppm
Rainbow trout 96-hour TL50:	>500 ppm
Bluegill sunfish 96-hour TL50:	>170 ppm
Daphnia magma 96-hour TL50:	>35 ppm

Precautions should be taken to minimize the amount of this product released to air, land and water.

13. Disposal Consideration

Disposal Method:

Discarded product is not a hazardous waste under RCRA, 29 CFR 261.

Container Disposal:

Empty container retains product residue. Observe all hazard precautions. Do not distribute, make available, furnish or reuse empty container except for storage and shipment of original product. Remove all product residue from container and puncture or otherwise destroy empty container before disposal.

14. Transport Information

DOT Hazard Description:

Not regulated

15. Regulatory Information

TSCA (Toxic Substances Control Act) Regulations 40CFR710:

All ingredients are on the TSCA Chemical Substances Inventory.

CERCLA SARA Regulations (40 CFR 355, 370 and 372):

Section 313 Notification – This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and of 40 CFR 372:

1.0% max. formaldehyde (CAS 50-00-0)

California Proposition 65:

WARNING – This product contains a chemical known to the State of California to cause cancer.

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16. Other Information

This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information nor do we offer any warranty against patent infringement.

HMIS and NFPA Ratings

<u>Hazard:</u>	<u>HMIS Ratings:</u>	<u>NFPA Ratings:</u>
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Health	2	2
Flammability	1	1
Reactivity	0	0

HMIS and NFPA Hazard Rating Codes:

0 – Least 1 – Slight 2 – Moderate 3 – High 4 - Severe