

MATERIAL SAFETY DATA SHEET
NIPAGUARD DMDMH

Page 1

Substance key: 000000055751
Version : 1 - 12 / USARevision Date: 01/23/2010
Date of printing :04/22/2010**Section 01 - Product Information****Identification of the company:**Clariant Corporation
4000 Monroe Road
Charlotte, NC, 28205
Telephone No.: +1 704 331 7000**Information of the substance/preparation:**Functional Chemicals
Product Safety 1-704-331-7710**Emergency tel. number:** +1 800-424-9300 CHEMTREC

Trade name: NIPAGUARD DMDMH

Synonyms: Product Has No Synonyms

Primary product use: Class of additive: Antimicrobial
Cosmetic
Detergent additive

Chemical family: aqueous biocide formulation

Section 02 - Composition information on hazardous ingredients**Hazardous ingredients:**

Component	CAS-no. (Trade secret no.)	Concentration
1,3-Di(Hydroxymethyl)-5,5-Dimethylhydantoin	6440-58-0	54 %
Formaldehyde	50-00-0	< 2 %

Section 03 - Hazards identification

Emergency overview: Clear, colorless liquid.
Eye irritant.
Skin irritant.
Potential sensitizer.

Expected Route of entry:

Inhalation: Mists may cause irritation to nose and lungs.

Skin contact: May cause sensitization by skin contact. Irritating to skin
Not expected to be toxic by skin absorption.

Eye contact: May cause severe irritation.

Ingestion: The acute oral toxicity of this material is between 500 and 5000 mg/kg. Relative to other materials, this material is classified as slightly toxic by ingestion.

Skin absorption: no

Health effects of exposure:

MATERIAL SAFETY DATA SHEET

NIPAGUARD DMDMH

Page 2

Substance key: 000000055751

Version : 1 - 12 / USA

Revision Date: 01/23/2010

Date of printing :04/22/2010

1,3-Bis(hydroxymethyl)- 5,5-dimethylhydantoin (6440-58-0)

1,3-di(hydroxymethyl)-5,5-dimethylhydantoin: Reported to be a moderate to mild skin irritant. Based on animal studies, ingestion may result in stomach ulceration and bleeding; other effects were noted for the liver and kidney. LD50 (oral)(rat): 2000 mg/kg. LD50 (dermal)(rabbit): > 20,000 mg/kg.

Formaldehyde (50-00-0)

Mutagenic activity detected in rats-inhalation, mouse-oral and peritoneal, and in numerous in-vitro studies. Poisonous if swallowed. Causes severe irritation and inflammation of mouth,throat and stomach. Severe stomach pains follow with possible loss of consciousness, blindness, stupor, nausea and vomiting leading to severe illness, possibly death. Slightly toxic by ingestion to animals. Highly irritating to nasal passages. Can cause inflammation of lining of nose, throat and lungs. Can cause pneumonia and abnormal accumulation of fluid in the lungs. Moderately toxic via inhalation to animals. Can cause moderate injury to skin, reddening and swelling. Sensitizer (allergic reaction possible). Liquid causes drying, cracking and scaling. Repeated or prolonged contact causes hardening (tanning). Moderately toxic to animals by absorption. Eye contact can cause chemical burn with irreversible damage. Vapor causes irritation, tearing and burning sensation. Carcinogenic to animals, (nasal cancer, lifetime inhalation study, rats). Considered an IARC 1 carcinogen - known to be carcinogenic to humans. Showed no evidence of reproductive effects in animal studies (mice, rats, Dogs). No evidence of effects on liver, kidneys, nervous system or blood in 180-day studies of rats, monkeys or hamsters. Clariant internal exposure guideline: 0.37 mg/m3

Known effects on other illnesses:

Pre-existing eye, skin, or lung conditions may be aggravated by exposure to this product.

Listed carcinogen:

IARC: Yes
NTP: Yes
OSHA: Yes
Other: Yes

HMIS:

Health: 2*

Flammability: 1

Reactivity: 0

Personal protection: H

Section 04 - First aid measures

After inhalation:

Get victim to fresh air. Give artificial respiration or oxygen if breathing has stopped. Get prompt medical attention. Do not give fluids if victim is unconscious.

After contact with skin:

Wash thoroughly with soap and water for 15 minutes. If skin irritation occurs, seek medical attention.

After contact with eyes:

Immediately flush eyes with running water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek prompt medical attention if redness or irritation occurs.

After ingestion:

Do not induce vomiting. Get immediate medical help.

Advice to doctor / Treatment:

None known.

Section 05 - Fire fighting measures

Flashpoint:

> 212 °F

MATERIAL SAFETY DATA SHEET

NIPAGUARD DMDMH

Page 3

Substance key: 000000055751
Version : 1 - 12 / USA

Revision Date: 01/23/2010
Date of printing :04/22/2010

Hazardous combustion products:

In case of fires, hazardous combustion gases are formed: Carbon monoxide (CO)
Carbon dioxide (CO₂)
Nitrogen oxides (NO_x)

Extinguishing media:

water spray jet
alcohol-resistant foam
carbon dioxide
dry powder

Special fire fighting procedure:

Exercise caution when fighting any chemical fire. Use NIOSH approved self-contained breathing apparatus and full protective clothing.

Unusual fire and explosion hazards:

Emits toxic and corrosive fumes under fire conditions.

Section 06 - Accidental release measures

Steps to be taken in case of spill or leak:

Pre-wet material with water to avoid dust formation. Sweep or vacuum and place in sealable container for disposal. Wear protective equipment and wash thoroughly after handling. Flush residue with water.

Section 07 - Handling and storage

Advice on safe handling:

Keep containers tightly closed when not in use. Store at temperatures between 59 - 104 F. Store away from direct sunlight.

Further info on storage conditions:

Store in original container.
Keep containers closed.

Section 08 - Exposure controls / personal protection

Occupational exposure limits:

Component	CAS number:	Regulatory list	Type of value	Values / Remarks
Formaldehyde	50-00-0	US OSHA 29 CFR 1910 Exposure limits	Time-weighted average (8 hrs)	0.75 ppm
Formaldehyde	50-00-0	US OSHA 29 CFR 1910 Exposure limits	Permissible exposure limit	0.75 ppm
Formaldehyde	50-00-0	US ACGIH Threshold Limit Values	Threshold Limit Value_Ceiling	0.3 ppm

Respiratory protection:

If airborne concentrations pose a health hazard, become irritating or exceed recommended limits, use a NIOSH approved respirator in accordance with OSHA respiratory protection requirements under 29 CFR 1910.134

MATERIAL SAFETY DATA SHEET

NIPAGUARD DMDMH

Page 4

Substance key: 000000055751
Version : 1 - 12 / USARevision Date: 01/23/2010
Date of printing :04/22/2010

Hand protection: Butyl Rubber, PVC Or Neoprene.
Eye protection: Chemical splash goggles and full face shield.
Other protective equipment: Clothing suitable to prevent skin contact.
Advice on system design: Local ventilation recommended, mechanical may be used. Provide adequate ventilation upon heating as formaldehyde vapors may be released.
IDLH:
Not Determined

Section 09 - Physical and chemical properties

Form: Liquid
Color: clear
Odor: characteristic
pH: 6.5 - 7.5
Miscibility with water: soluble
Density: approx. 1.16 g/cm³
Melting point : approx. 32 °F
Vapor pressure: 22.51 Torr (25 °C)
Corresp. to vapour pressure of water

Section 10 - Stability and reactivity

Thermal decomposition: 200 °C (Heating rate:3 K/min)
No decomposition if used as prescribed.
Chemical stability: Stable.
Hazardous Polymerization: Will not occur.
Conditions to avoid: None known.
Conditions to avoid: Acids, alkalis, strong oxidizing agents

Section 11 - Toxicological information

Product information:
Acute oral toxicity: LD50 > 2,000 mg/kg (rat)
Source: literature
Skin irritation: Not tested
Eye irritation: Not tested
Sensitization: sensitizing

MATERIAL SAFETY DATA SHEET

NIPAGUARD DMDMH

Page 5

Substance key: 000000055751
Version : 1 - 12 / USA

Revision Date: 01/23/2010
Date of printing :04/22/2010

Other relevant toxicity information:

Inhalation of vapours leads to irritation of respiratory tract and mucous membranes, headache, nausea, dizziness, vomiting

Section 12 - Ecological information

Product information:

Fish toxicity: LC50 > 100 mg/l (Fish general (Pisces))
Method: evaluated

Remarks:

Do not allow to enter soil, waterways or waste water
Biologically degradable, when diluted may be degraded in biological purification plants

Section 13 - Disposal considerations

Waste disposal information:

Dispose of spilled or waste product, contaminated soil and other contaminated materials in licensed landfill or treatment facility in accordance with all local, state, and federal regulations.

RCRA hazardous waste:

No -- Not as sold.
RCRA number: NONE

Section 14 - Transport information

DOT not restricted
IATA not restricted
IMDG not restricted

Section 15 - Regulatory information

TSCA Status:

All components of this product are listed on the TSCA Inventory. However, the primary use of this product is NOT subject to TSCA but rather to FDA and must comply with the FDA regulations.

SARA (section 311/312):

Reactive hazard: no
Pressure hazard: no
Fire hazard: no
Immediate/acute: yes
Delayed/chronic: yes

SARA 302 information:

Component	CAS-no. (Trade secret no.)	Concentration
Formaldehyde	50-00-0	< 2 %

SARA 313 information:

This product contains toxic chemical(s) subject to the reporting requirements of Section 313 of the

MATERIAL SAFETY DATA SHEET
NIPAGUARD DMDMH

Page 6

Substance key: 00000055751
Version : 1 - 12 / USARevision Date: 01/23/2010
Date of printing :04/22/2010

Emergency Planning and Community Right- To-Know Act of 1986 and 40 CFR 372. Any such toxic chemical(s) are shown below. This information must be included in all MSDS's that are copied and distributed for this material.

Component	CAS-no. (Trade secret no.)	Concentration
Formaldehyde	50-00-0	< 2 %

Clean Water Act:

Contains no known priority pollutants at concentrations greater than 0.1%.

Volatile organic compounds VOC:

Remarks: Not Available

CERCLA information:

Component	CAS-no. (Trade secret no.)	Percentage	RQ
Formaldehyde	50-00-0	< 2 %	100 Pounds
Formaldehyde	50-00-0	< 2 %	45.4 kg

FDA:

FDA regulated cosmetic ingredient.

MATERIAL SAFETY DATA SHEET

NIPAGUARD DMDMH

Page 7

Substance key: 000000055751
Version : 1 - 12 / USA

Revision Date: 01/23/2010
Date of printing :04/22/2010

Section 16 - Other information**Other precautions:**

Avoid breathing fumes or vapors and avoid contact with skin and eyes. Wear proper protective equipment. Keep container closed when not in use.

Label information:**WARNING!**

CAN CAUSE SKIN, EYE AND RESPIRATORY IRRITATION MAY CAUSE SKIN SENSITIZATION REPEATED EXPOSURES MAY RESULT IN LIVER OR KIDNEY DAMAGE. This product contains and releases formaldehyde. Formaldehyde is a potential cancer hazard. May cause birth defects. May cause dermal and respiratory sensitization. May cause eye, skin and respiratory irritation May be harmful if inhaled, swallowed or absorbed through skin. Risk of cancer depends on duration and level of exposure

Avoid breathing dust, fumes, or vapor. Use with adequate ventilation or appropriate respiratory protection. Avoid contact with eyes, skin and clothing. Keep container closed when not in use. Use ventilation and/or respiratory protection in order to keep exposure levels to a minimum. Wash thoroughly after handling.

Eye contact: immediately flush eyes with running water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek prompt medical attention if redness or irritation occurs. Skin contact: wash thoroughly with soap and water for 15 minutes. If skin irritation occurs, seek medical attention. Wash contaminated clothing before reuse. Inhalation: remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if respiratory irritation continues. Ingestion: do not induce vomiting. Seek immediate medical assistance.

This information is supplied under the OSHA Hazard Communication Standard, 29 CFR 1910.1200, and is offered in good faith based on data available to us that we believe to be true and accurate. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable to the material. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate for that use. No warranty, express or implied, is made regarding the accuracy of this data, the hazards connected with the use of the material, or the results to be obtained from the use thereof. We assume no responsibility for damage or injury from the use of the product described herein. Data provided here are typical and not intended for use as product specifications.