

# Material Safety Data Sheet



PRODUCT NAME: DMDM HYDANTOIN

## CHEMICAL PRODUCT AND DISTRIBUTOR IDENTIFICATION

TRADE NAME: DMDM HYDANTOIN  
CAS #: 6440-58-0  
DATE: September 16, 2008

DISTRIBUTOR: ACME-HARDESTY COMPANY  
ADDRESS: 450 Sentry Parkway  
Blue Bell, PA 19422

TELEPHONE: (866) 226 – 3834  
FAX: (215) 591 – 3620  
EMERGENCY: CHEMTREC (800) 424-9300

## COMPOSITION / INFORMATION ON INGREDIENTS

DANGEROUS SUBSTANCE	CAS#	RANGE (%)	SYMBOL / R PHRASE
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine [EC No 229-222-8]	6440-58-0	55 %	
Formaldehyde [EC No 200-001-8]	50-00-0	NMT 1 %	Xi 43

## HAZARDS IDENTIFICATION

HAZARDS DESIGNATION: Xi  
MAN/ENVIRONMENT PARTICULAR DANGERS: R43 – May cause sensitization by skin contact

NOTE: Classification system EC-classification published in CHIP approved supply list.

## STABILITY AND REACTIVITY

HAZARDOUS REACTIONS: No hazardous reactions known.  
HAZARDOUS DECOMP. PROD: No hazardous decomposition products known.

## FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Water spray jet, dry powder, CO<sub>2</sub>, Foam **DO NOT USE** Full Water jet for safety reasons  
SPECIAL PROTECTIVE EQUIPMENT: Use breathing apparatus.  
SPECIAL EXPOSURE HAZARDS ARISING FROM SUBSTANCE/PREPARATION ITSELF, COMBUSTION PRODUCTS: Risk of formation of toxic pyrolysis products  
ADDITIONAL INFORMATION: Cool containers at risk with water spray jet.

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PHYSICAL AND CHEMICAL PROPERTIES

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FORM:	Liquid
COLOR:	Colorless
ODOR:	Almost odorless
pH VALUE:	6.5 – 7.5
MELTING POINT:	ca. -11°C
BOILING POINT:	96°C
FLASH POINT:	100°C
FLAMMABILITY (°C):	--
SELF-IGNITION TEMP:	--
LEL:	--
UEL:	--
COMBUSTIBLE PROPERTIES	no
VAPOR PRESSURE, (20°C):	1.06x10 <sup>-09</sup> mmHg
DENSITY:	1.15 – 1.16 g/cm <sup>3</sup> /25°C
SOLUBILITY IN WATER	Soluble
PARTITION COEFFICIENT: n-octanol/water:	--
VISCOSITY:	--

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FIRST AID MEASURES

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GENERAL INFORMATION:	Not applicable.
INHALATION:	Ensure supply of fresh air. In the event of symptoms refer for medical treatment
SKIN CONTACT:	Wash off immediately with soap & water. Consult a doctor if skin irritation persists.
EYE CONTACT:	Rinse thoroughly with plenty of water and seek medical advice.
INGESTION:	Rinse out mouth and give plenty of water to drink. Seek medical advice immediately.
ADVICE TO DOCTOR/TREATMENT:	Treat symptomatically

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ACCIDENTAL RELEASE MEASURES

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PERSONAL PRECAUTIONS:	Ensure adequate ventilation. Keep away from sources of ignition
ENVIRONMENTAL PRECAUTIONS:	Do not discharge into the drains/surface waters/groundwater.
METHODS FOR CLEAN-UP:	Take up with absorbent material (e.g. sand). Dispose of absorbed material in accordance with the regulations.

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DISPOSAL CONSIDERATIONS

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DISPOSAL / PRODUCT:	Disposal must be in accordance with local, state, or federal regulations.
DISPOSAL/CONTAMINATED PKG:	Empty contaminated packaging thoroughly. They can be recycled after thorough and proper cleaning.
RECOMMENDED CLEANING AGENT:	Water, if necessary, with cleaning agent.

EUROPEAN WASTE CATALOGUE:

07 00 00	WASTES FROM ORGANIC CHEMICAL PROCESSES
07 06 00	Wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics
07 06 99	Wastes not otherwise specified

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HANDLING AND STORAGE

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SAFE HANDLING: Avoid the formation of aerosols.  
Use only in well-ventilated areas.  
Use solvent resistant equipment

STORAGE ROOM/VESSELS: Keep only in original container.  
Keep container in a well-ventilated place.  
Keep container tightly closed.  
Protect from heat/overheating  
Provide solvent-resistant and impermeable floor.

STORAGE COMPATIBILITY: Not applicable.

FIRE/EXPLOSION PROTECTION: Take precautionary measures against static discharges.  
Keep away from sources of ignition.

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EXPOSURE CONTROLS / PERSONAL PROTECTION

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RESPIRATORY PROTECTION: Breathing apparatus in event of aerosol or mist formation.  
Short term: filter apparatus, combination filter A-P1

HAND PROTECTION: Gloves (solvent resistant)

EYE PROTECTION: Protective goggles.

SKIN PROTECTION: Not applicable

GENERAL PROTECTIVE MEASURES: Do not inhale gases/vapors/aerosols. Avoid contact with eyes and skin.

HYGIENE MEASURES: Do not smoke when working. Wash hands before breaks and after work. Use barrier skin cream.

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TOXICOLOGICAL INFORMATION

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	Dimension	Species	Value:
ACUTE ORAL TOXICITY	LD50	rat	5000 mg/kg
ACUTE DERMAL TOXICITY:	LD50	rabbit	--
ACUTE INHALATIVE TOXICITY:	LC50	rat	--
IRRITANT EFFECT ON SKIN	--		
IRRITANT EFFECT ON EYE:	--		
SENSITIZATION:			Sensitization possible by skin contact
SUB ACUTE TOXICITY:	--		
CHRONIC TOXICITY:	--		
SUB CHRONIC TOXICITY:	--		
MUTAGENICITY:	--		
REPRODUCTION TOXICITY:	--		
CARCINOGENICITY:	--		
GENERAL REMARKS:			Not applicable.

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ECOLOGICAL INFORMATION

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INFORMATION ABOUT ELIMINATION (PERSISTENCE AND DEGRADABILITY):

The components are readily biodegradable/to eliminate

BEHAVIOR IN ENVIRONMENT COMPARTMENTS:

FISH TOXICITY	N/A
DAPHNIA TOXICITY	N/A
BACTERIA TOXICITY	N/A
BEHAVIOR IN SEWAGE PLANT	N/A

MOBILITY AND BIO-ACCUMULATION POTENTIAL:

Due to the distribution coefficient n-octanol/water, an accumulation in organisms is not expected.  
Log Pow -2.37; 1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine.

ECO-TOXICOLOGICAL EFFECTS:

LC50 / 96 h	173 – 515 mg/l (fish)
EC50 / 96 h	37 mg/l (Daphnia)

CHEMICAL OXYGEN DEMAND	No
BIOCHEMICAL OXYGEN DEMAND	No
AOX-ADVICE	No

CONTAINS HEAVY METALS AND COMPOUNDS OF 76/464 EC: Due to its formulation, the product does not contain any heavy metals

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TRANSPORT INFORMATION

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LAND TRANSPORT ADR/RID (cross-border domestic):

ADR/RID ADG (Australia) class:	No dangerous good
UN-No.:	---
Packaging Group:	---
Label:	---
Destination of Goods:	---
Marine transport/IMDG/GGVSea:	---

IMDG Class:	No dangerous good
UN-No.:	---
Packing Group	---
Label:	---
EMS Number:	---
Marine Pollutant:	---
Proper shipping name	---

Air Transport/ICAO and IATA-DGR

ICAO/IATA Class:	No dangerous good
UN No.:	---
Label:	---
Packing group	---
Proper shipping name	---

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REGULATORY INFORMATION

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LABELING Does not require a hazard warning label, but the normal safety precautions for handling chemicals must be observed.

LETTER/HAZARD DESIGNATION: Xi Irritant

HAZARD SYMBOLS:

R Phrase: R43 May cause sensitization by skin contact

S Phrases: S26 Avoid contact with skin  
S36/37 Wear suitable protective clothing and gloves

REGULATIONS WHICH MAY APPLY IN EVENT OF ACCIDENT:

CONTROL OF MAJOR ACCIDENT HAZARDS (COMAH): Not listed in COMAH

WATER HAZARD CLASS: WGK 1

TSCA: Listed

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ADDITIONAL INFORMATION

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ADDITIONAL INFORMATION: The product contains materials that are harmful to the environment.  
Avoid transfer into the environment.

The data herein are based on our current knowledge and believed to be reliable. Acme-Hardesty Co., provides this information without any representation or warranty, expressed or implied, regarding its accuracy or correctness.

Users must make their own determination that handling, storage and use of the product in the anticipated manner is safe and appropriate. Because these actions of the user are out of our control, and may be beyond our knowledge, we do not assume responsibility and expressly disclaim liability for loss, damage, expense or any other claim arising out of or in any way connected with the handling, storage, use or disposal of the product.

Disposal of containers must comply with applicable federal, state and local laws and regulations. Empty containers should never be given to individuals.