

DOW CHEMICAL U S A -- 15480 ND,440 DRN DIETHYLENETRIAMINE HP FS -- 6810-00-995-4804  
===== Product Identification =====

Product ID:15480 ND,440 DRN DIETHYLENETRIAMINE HP FS

MSDS Date:11/05/1987

FSC:6810

NIIN:00-995-4804

MSDS Number: BGCGY

=== Responsible Party ===

Company Name:DOW CHEMICAL U S A

Address:2020 DOW CENTER BARSTOW BLDG

City:MIDLAND

State:MI

ZIP:48640

Country:US

Info Phone Num:517-636-4400

Emergency Phone Num:517-636-4400/800-424-9300(CHEMTREC)

CAGE:71983

=== Contractor Identification ===

Company Name:DOW CHEMICAL U.S.A.

City:MIDLAND

State:MI

ZIP:48674

Country:US

Phone:517-636-4400

CAGE:71983

Company Name:R.H.CARLSON COMPANY,INC.

Address:41-CHESTNUT STREET

Box:1687

City:GREENWICH

State:CT

ZIP:06830-5921

Country:US

Phone:203-531-5500

CAGE:33530

===== Composition/Information on Ingredients =====

Ingred Name:DIETHYLENE TRIAMINE

CAS:111-40-0

RTECS #:IE1225000

Fraction by Wt: 99%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:1 PPM  
ACGIH TLV:S, 1 PPM; 9293

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===== Hazards Identification =====

LD50 LC50 Mixture:LD50 ORAL RAT IS 1080 MG/KG.  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:ACUTE- CORROSIVE. INHALED:MIST/VAPOR  
MAY DAMAGE UPPER RESPIRATORY TRACT & LUNG TISSUE WHICH MAY LEAD TO  
CHEMICAL PNEUMONIA. EYE/SKIN:CAN  
CAUSE SEVERE BURNS. BLINDNESS MAY  
OCCUR. ORAL:SEVERE BURNS TO MOUTH, THROAT, ESOPHAGUS, STOMACH.  
CHRONIC- SKIN NECROSIS MAY OCCUR.  
Effects of Overexposure:CORROSIVE. MIST/VAPOR MAY DAMAGE UPPER  
RESPIRATORY TRACT & LUNG TISSUE WHICH MAY LEAD TO CHEMICAL  
PNEUMONIA. CAN CAUSE SEVERE EYE OR SKIN BURNS. BLINDNESS MAY OCCUR.  
IF INGESTED, CAN CAUSE SEVERE BURNS TO MOUTH, THROAT, ESOPHAGUS,  
STOMACH.REPEATED OR PROLONGED SKIN CONTACT MAY CAUSE NECROSIS.  
Medical Cond Aggravated by  
Exposure:PERSONS WITH PRE-EXISTING SKIN  
DISORDERS OR EYE PROBLEMS OR IMPAIRED RESPIRATORY FUNCTION MAY BE  
MORE SUSCEPTIBLE TO THE EFFECTS OF THE SUBSTANCE.

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===== First Aid Measures =====

First Aid:GET IMMEDIATE MEDICAL HELP. EYES/SKIN:FLUSH WITH WATER FOR AT  
LEAST 15 MINUTES. HOLD EYELIDS OPEN. INHALED:REMOVE TO FRESH AIR.  
PROVIDE CPR/OXYGEN IF NECESSARY. ORAL:DO NOT INDUCE VOMITING. SEE  
PHYSICIAN. NOTE TO PHYSICIAN:CORROSIVE. MAY CAUSE STRICTURE. IF  
LAVAGE IS PERFORMED, SUGGEST ENDOTRACHEAL CONTROL. IF BURN IS  
PRESENT, TREAT AS ANY THERMAL BURN, AFTER DECONTAMINATION.

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===== Fire Fighting Measures =====

Flash Point:101.7C, 215.F  
Extinguishing Media:WATER FOG, CO2, FOAM OR DRY CHEMICALS. WATER SPRAY  
MAY BE USED TO KEEP FIRE EXPOSED CONTAINERS COOL & FLUSH SPILLS  
AWAY.  
Fire Fighting Procedures:WEAR FULL PROTECTIVE CLOTHING AND  
NIOSH-APPROVED SELF-CONTAINED BREATHING APP

ARATUS WITH FULL

FACEPIECE OPERATED IN THE POSITIVE PRESSURE MODE.

Unusual Fire/Explosion Hazard:MAY PRODUCE NITROGEN OXIDES.

===== Accidental Release Measures =====

Spill Release Procedures:VENTILATE AREA. DILUTE SPILLS WITH WATER AND RECOVER OR USE NONCOMBUSTIBLE ABSORBENT MATERIAL SUCH AS SAND AND SHOVEL INTO SUITABLE CONTAINERS FOR LATER DISPOSAL. NEUTRALIZE RESIDUES WITH WEAK ACID AND FLUSH INTO SEWER WITH PLENTY OF WATER IF ALLOWED

Neutralizing Agent:WEAK ACID

===== Handling and Storage =====

Handling and Storage Precautions:STORAGE-STORE IN DRY,COOL PLACE AWAY FROM ACIDS,COPPER & COPPER-BEARING ALLOYS.

Other Precautions:DO NOT GET IN EYES, ON SKIN OR ON CLOTHING. DO NOT GENERATE MISTS OR VAPORS. DO NOT BREATHE MIST OR FUMES. KEEP OUT OF REACH OF CHILDREN. DO NOT TAKE INTERNALLY. WASH THOROUGHLY AFTER HANDLING. FOR INDUSTRIAL USE ONLY.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:USE ONLY WITH ADEQUATE VENTILATION OR WEAR NIOSH APPROVED ORGANIC VAPOR RESPIRATOR WHEN AIR CONCENTRATION IS GREATER THAN THE TLV OR PEL. USE CARTRIDGE FILTER FOR ALKALINE MIST.

Ventilation:LOCAL EXHAUST VENTILATION MAY BE NECESSARY FOR SOME OPERATIONS.

Protective Gloves:CHEMICAL RESISTANT GLOVES/RUBBER

Eye Protection:CHEMICAL SAFETY GOGGLES WITH SIDE SHIELD

Other Protective Equipment:CHEMICALLY RESISTANT COVERALLS, HAT AND SHOES

OR BOOTS, EYE WASH AND SAFETY EQUIPMENT

Work Hygienic Practices:WASH THOROUGHLY BEFORE EATING, DRINKING OR SMOKING.

Supplemental Safety and Health

GROUND ALL TRANSFER EQUIPMENTS. HOLD BULK STORAGE UNDER NITROGEN BLANKET.

===== Physical/Chemical Properties =====

HCC:B2

NRC/State Lic Num:NOT RELEVANT

Boiling Pt:=-198.9C, 390.F

Melt/Freeze Pt:=-35.C, -31.F

Vapor Pres: