

DOW CHEMICAL CO -- 21189, DIETHYLENETRIAMINE -- 6810-00-995-4804
===== Product Identification =====

Product ID:21189, DIETHYLENETRIAMINE
MSDS Date:07/22/1999
FSC:6810
NIIN:00-995-4804
Status Code:A
MSDS Number: CKWJN
=== Responsible Party ===
Company Name:DOW CHEMICAL CO
Address:100 LARKIN CENTER
City:MIDLAND
State:MI
ZIP:48674
Country:US
Info Phone Num:800-258-2436
Emergency Phone Num:517-636-44
00
Resp. Party Other MSDS Num.:000071
CAGE:96717
=== Contractor Identification ===
Company Name:DOW CHEMICAL CO
Address:100 LARKIN CENTER
Box:City:MIDLAND
State:MI
ZIP:48674
Country:US
Phone:800-258-2436
Contract Num:SP0450-01-M-D381
CAGE:96717
Company Name:TELECHEM INTERNATIONAL, INC
Address:524 E WEDDELL DRIVE SUITE 3
Box:City:SUNNYVALE
State:CA
ZIP:94089-2115
Country:US
Phone:916-941-3688
CAGE:1KH20

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

Ingred Name:DIETHYLENET

RIAMINE

CAS:111-40-0

RTECS #:IE1225000

Minumum % Wt:98.5

Maxumum % Wt:99.9

ACGIH TLV:4.2 MG/M3;1 PPM

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

LD50 LC50 Mixture:ORAL LD50 RATS: 1080-2330 MG/KG

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:EYE: MAY CAUSE SEVERE IRRITATION

W/CORNEAL INJURY,MAY RESULT IN PERMANENT IMPAIRMENT OF VISION,EVEN BLINDNESS.VAPORS MAY IRRITATE EYES. SKIN:SHORT SINGLE EXPOSURE MAY CAUSE SEVERE

BURNS,HAS CAUSED ALL ERGIC SKIN REACTIONS. A SINGLE PROLONGED EXPOSURE MAY RESULT IN THE MATERIAL BEING ABSORBED IN HARMFUL AMOUNTS. INGESTION: SINGLE DOSE ORAL TOXICITY IS CONSIDERED LOW. INGESTION MAY CAUSE GASTROINTESTINAL IRRITATION OR ULCERATION,MAY CAUSE BURNS OF MOUTH & THROAT. INHALATION: VAPORS GENERATED AT INCREASED TEMPERATURES OR TO MIST MAY CAUSE SERIOUS ADVERSE EFFECTS,EVEN DEATH.MAY CAUSE SEVERE IRRITATION TO UPPER RESPIRATORY TRACT.

Explanation of Ca

rcinogenicity:DID NOT CAUSE CANCER IN LONG-TERM ANIMAL STUDIES.

Effects of Overexposure:EYES: SEVERE IRRITATION, CORNEAL INJURY, PERMANENT VISION IMPAIRMENT/BLINDNESS. SKIN: SEVERE BURNS, ALLERGIC SKIN REACTIONS. INGESTION: GASTROINTESTINAL IRRITATION OR ULCERATION, BURNS TO THROAT & MOUTH. INHALATION: SEVERE IRRITATION TO UPPER RESPIRATORY TRACT, RESPIRATORY SENSITIZATION.

Medical Cond Aggravated by Exposure:EXCESSIVE EXPOSURE MAY AGGRAVATE A PREEXISTING ASTHMA.

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

First Aid:EYE: IMMEDIATE AND CONTINUOUS IRRIGATION WITH FLOWING WATER FOR AT LEAST 30 MINUTES IS IMPERATIVE. PROMPT MEDICAL CONSULTATION IS ESSENTIAL. SKIN: IMMEDIATE AND CONTINUED THOROUGH WASHING WHILE REMOVING CONTAMINATED CLOTHING. PROMPT MEDICAL CONSULTATION IS ESSENTIAL. INGESTION: DO NOT INDUCE VOMITING. GIVE LARGE AMOUNTS OF WATER OR MILK IF AVAILABLE AND TRANSPORT TO MEDICAL FACILITY. INHALATION: R

REMOVE TO FRESH AIR IF EFFECTS OCCUR. CONSULT A PHYSICIAN.

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

Flash Point Method:PMCC

Flash Point:=102.C, 215.6F

Autoignition Temp:Autoignition Temp Text:N/D

Lower Limits:1.9

Upper Limits:11.6

Extinguishing Media:WATER FOG, FOAM, CO2, AND DRY CHEMICAL. USE POSITIVE PRESSURE, SELF CONTAINED BREATHING APPARATUS. WEAR FULL PROTECTIVE CLOTHING.

Fire Fighting Procedures:KEEP UNNECESSARY PEOPLE AWAY; ISOLATE HAZARD AREA

AND DENY UNNECESSARY ENTRY. HIGHLY TOXIC FUMES ARE RELEASED IN FIRE SITUATIONS. FIRE WATER RUN OFF MAY BE TOXIC. WHEN USING WATER SPRAY, BOIL OVER MAY OCCUR WHEN THE PRODUCT TEMPERATURE REACHES THE BOILING POINT OF WATER (TANK TYPE SCENARIOS, NOT SPILLS).

Unusual Fire/Explosion Hazard:NO DATA PROVIDED BY MANUFACTURER

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

Spill Release Procedures:SMALL SPILLS: ABSORB WITH MATERIALS SUCH AS:

CLAY, DIRT, MILLSORB &

SAND. AVOID MATERIALS SUCH AS: CELLULOSE &

SAWDUST. CLEAN UP RESIDUAL WITH NON-COMBUSTIBLE ABSORBENT MATERIAL

& WASH WITH WATER. REMOVE WITH SHOVEL. PLACE IN PROPERLY LABELED

DRY SEALABLE CONTAINERS. FOR LARGE SPILLS: (SEE OTHER INFORMATION)

Neutralizing Agent:NO DATA PROVIDED BY MANUFACTURER.

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

Handling and Storage Precautions:HANDLING: ELECTRICALLY GROUND ALL

EQUIPMENT. TO AVOID UNCONTROLLED EMISSIONS VENT VA

POR FROM

CONTAINER TO STORAGE TANK. NEVER USE AIR PRESSURE FOR TRANSFERRING

PRODUCT. DO NOT EAT, DRINK, OR SMOKE IN WORKING AREA. NO SMOKING,

OPEN FLAMES, OR SOURCES OF IGNITION IN HANDLING AND STORAGE AREA.

AVOID

Other Precautions:CONTACT WITH VAPORS FROM HEAD SPACE OF CONTAINER.

MAINTAIN AN INERT ATMOSPHERE. STORAGE: KEEP CONTAINERS TIGHTLY

CLOSED WHEN NOT IN USE. STORE IN STAINLESS STEEL OR ALUMINUM.

MAINTAIN A NITROGEN ATMOSPHERE. PROTECT FROM ATMOSPHERIC MOISTURE

URE.

MINIMIZE SOURCES OF IGNITION, SUCH AS STATIC BUILDUP, HEAT , SPARK, OR FLAME.

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

Respiratory Protection:ATMOSPHERIC LEVELS SHOULD BE MAINTAINED BELOW THE EXPOSURE GUIDELINES. WHEN RESPIRATORY PROTECTION IS REQUIRED, USE AN APPROVED AIR-PURIFYING OR POSITIVE-PRESSURE SUPPLIED-AIR RESPIRATOR DEPENDING ON THE POTENTIAL AIRBORNE CONCENTRATION. IN MISTY ATMOSPHERES, USE AN APPROVED ORGANIC VAPOR RESPIRATO

R IN COMBINATION WITH A DUST/MIST FILTER.

Ventilation:PROVIDE GENERAL AND/OR LOCAL EXHAUST VENTILATION TO CONTROL AIRBORNE LEVELS BELOW THE EXPOSURE GUIDELINES.

Protective Gloves:GLOVES

Eye Protection:CHEMICAL GOGGLES OR FULL FACE RESPIRATOR

Other Protective Equipment:EYE WASH FOUNTAIN IN IMMEDIATE WORK AREA.PROTECTIVE CLOTHING IMPERVIOUS TO THIS MATERIAL. FACESHIELD, GOLVES, BOOTS, APRON, OR FULL-BODY SUIT DEPENDS ON OPERATION. SAFETY SHOWER

Work Hygienic Practices:REMOVE CO

NTAIMINATED CLOTHING, WASH SKIN WITH SOAP AND WATER AND LAUNDER CLOTHING BEFORE REUSE.CONTAMINATED LEATHER ITEMS SUCH AS SHOES, BELTS, WATCHBANDS, SHOULD BE REMOVED AND DESTROYED.

Supplemental Safety and Health

NOTE TO PHYSICIAN: MAY CAUSE TISSUE DESTRUCTION LEADING TO STRICTURE.

IF LAVAGE IS PERFORMED,SUGGEST ENDOTRACHEAL/ESOPHAGOSCOPIC CONTROL.

IF BURN IS PRESENT, TREAT AS ANY THERMAL BURN, AFTER DECONTAMI NATION. NO ANTIDOTE. SUPPORTIVE CARE. TREATMENT BASED ON JUDGE ME

NT OF THE PHYSICIAN IN RESPONSE TO PATIENT REACTIONS.

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

HCC:B2

Boiling Pt:=199.C, 390.2F

Vapor Pres: