MATERIAL SAFETY DATA SHEET  PAGE 1

IDENTIFICATION

PRODUCT #: 11000-0
NAME: DIETHYLAMINE, 98%
CAS #: 109-89-7
MF: C8H11N

SYNONYMS
DEN * DIACETYLAMINE (GERMAN) * DIETHANOLAMINE * N,N-DIETHYLAMINE *
DIETHYLAMINE (ACGIH) * OSHA * DIETILAMINA (ITALIAN) * DİETİLMİN A 
(POLISH) * ETHANAMINE, N-ETHYL- * UN 1154 (DOT) *

TOXICITY HAZARDS

RTECS NO: HZ8750000
DIETHYLAMINE

IRRITATION DATA
SKN-RBT 10 MG/24H OPEN MLD
SKN-RBT 50 MG OPEN MLD
SKN-RBT 100 MG/24H MOD
EYE-RBT 50 UG OPEN SEV

TOXICITY DATA
ORL-RAT LD50:540 MG/KG
IHL-RAT LC50:4000 PPM/4H
ORL-MUS LD50:500 MG/KG
SKN-RAT LD50:820 MG/KG
IHL-MAM LC50:5000 MG/M3

REVIEWS, STANDARDS, AND REGULATIONS
ACGIH TLV-TWA 10 PPM; STEL 25 PPM 85INAB 5,197,98
MSHA STANDARD-ART: TWA 25 PPM (75 MG/M3) OISAC* 343,71
OSHA PER: 8H TWA 25 PPM (75 MG/M3) FERAC 54,292,389
OSHA DEL FINAL: 8H TWA 10 PPM (30 MG/M3) STEL 25 PPM (75 MG/M3) FERAC 54,292,389
NH2 1974; HZD 24,680; NTS 20; TNF 2138; NOS 28; TNE 34647
NOS 1983; HZD 24,680; NTS 20; TNE 1334; NOS 24; TNE 275180; TFE 6758
EPA TSCA CHEMICAL INVENTORY, JUNE 1990
EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, SEPTEMBER 1990
OSHA ANALYTICAL METHOD #41

TARGET ORGAN DATA
SENSE ORGANS AND SPECIFIC SENSES (LACRIMATION)
BEHAVIORAL (SLEEP)
BEHAVIORAL (SOMNOLENCE)
BEHAVIORAL (MUSCLE CONTRACTION OR SPASTICITY)
LUNGS, THORAX OR RESPIRATION (CYANOSIS)

ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS)
DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR COMPLETE INFORMATION.

HEALTH HAZARD DATA

ACUTE EFFECTS
HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN.

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MATERIAL SAFETY DATA SHEET

CUST#: 523216
PO#: QC10266

PRODUCT #: 11000-0
CAS #: 109-89-7
MF: C4H11N

NAME: DIETHYLAMINE, 98%

-------------------------- HEALTH HAZARD DATA --------------------------

MATERIAL IS EXTREMELY DESTRUCTIVE TO TISSUE OF THE MUCOUS MEMBRANES
AND UPPER RESPIRATORY TRACT, EYES AND SKIN.
INHALATION MAY BE FATAL AS A RESULT OF SPASM, INFLAMMATION AND EDEMA
OF THE LARYNX AND BRONCHI, CHEMICAL PNEUMONITIS AND PULMONARY EDEMA.
SYMPTOMS OF EXPOSURE MAY INCLUDE BURNING SENSATION, COUGHING,
WHEEZING, LARYNGITIS, SHORTNESS OF BREATH, HEADACHE, NAUSEA AND
VOMITING. MAY CAUSE ALLERGIC REACTION.

FIRST AID
IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES OR SKIN WITH COPIOUS
AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED
CLOTHING AND SHOES.
ASSURE ADEQUATE FLUSHING OF THE EYES BY SEPARATING THE EYELIDS
WITH FINGERS.
IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL
RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.
IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.
CALL A PHYSICIAN.
WASH CONTAMINATED CLOTHING BEFORE REUSE.

-------------------------- PHYSICAL DATA --------------------------

BOILING PT: 55 C
MELTING PT: -50 C
SPECIFIC GRAVITY: 0.707
VAPOR DENSITY: 2.5
VAPOR PRESSURE: 189 MM Hg at 20 C
400 MM Hg at 38 C

APPEARANCE AND ODOR
COLORLESS LIQUID

-------------------------- FIRE AND EXPLOSION HAZARD DATA --------------------------

FLASHPOINT: -20 F
AUTOIGNITION TEMPERATURE: 594 F
LOWER EXPLOSION LEVEL: 1.0%
UPPER EXPLOSION LEVEL: 10.1%

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PRODUCT #: 11000-0
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MF: C4H11N

--- FIRE AND EXPLOSION HAZARD DATA ---

EXTINGUISHING MEDIA
CARBON DIOXIDE, DRY CHEMICAL POWDER, ALCOHOL OR POLYMER FOAM.

SPECIAL FIREFIGHTING PROCEDURES
WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.

UNUSUAL FIRE AND EXPLOSION HAZARDS
EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

EXTREMELY FLAMMABLE.
VAPOR MAY TRAVEL CONSIDERABLE DISTANCE TO SOURCE OF IGNITION AND FLASH BACK.

--- REACTIVITY DATA ---

INCOMPATIBILITIES
ACIDS
OXIDIZING AGENTS

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
THERMAL DECOMPOSITION MAY PRODUCE CARBON MONOXIDE, CARBON DIOXIDE, AND NITROGEN OXIDES.

--- SPILL OR LEAK PROCEDURES ---

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED
EVACUATE AREA.
SHUT OFF ALL SOURCES OF IGNITION.
WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES.
ABSORB ON SAND OR VERMICULITE AND PLACE IN CLOSED CONTAINERS FOR DISPOSAL.
VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

--- WASTE DISPOSAL METHOD ---
BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER BUT EXERT EXTRA CARE IN IGNITING AS THIS MATERIAL IS HIGHLY FLAMMABLE.

--- PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE ---
WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.
USE ONLY IN A CHEMICAL FUME HOOD.

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PRODUCT #: 11000-0  NAME: DIETHYLAMINE, 98%
CAS #: 109-89-7  MF: C4H11N

--- PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE ---
SAFETY SHOWER AND EYE BATH.
FACESHIELD (8-INCH MINIMUM).
DO NOT BREATHE VAPOR.
DO NOT GET IN EYES, ON SKIN, ON CLOTHING.
AVOID PROLONGED OR REPEATED EXPOSURE.
READILY ABSORBED THROUGH SKIN.
WASH THOROUGHLY AFTER HANDLING.
CORROSIVE.
TOXIC.
SENSITIZER.
LACHRYMATOR.
KEEP TIGHTLY CLOSED.
KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME.
STORE IN A COOL, DRY PLACE.

REGULATORY INFORMATION
THESE PRODUCTS ARE SUBJECT TO SARA SECTION 313 REPORTING REQUIREMENTS.
THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE
ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. ALDRICH SHALL NOT BE HELD
LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE
ABOVE PRODUCT. SEE REVERSE SIDE OF INVOICE OR PACKING SLIP FOR ADDITIONAL
TERMS AND CONDITIONS OF SALE.

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