

SIGMA-ALDRICH CHEMICAL COMPANY -- 109908, DI(ETHYLENE GLYCOL) METHYL ETHER, 99% --
6810-01-445-8304

===== Product Identification =====

Product ID:109908, DI(ETHYLENE GLYCOL) METHYL ETHER, 99%

MSDS Date:10/16/1999

FSC:6810

NIIN:01-445-8304

Status Code:A

MSDS Number: CKTHY

=== Responsible Party ===

Company Name:SIGMA-ALDRICH CHEMICAL COMPANY

Address:3050 SPRUCE ST

Box:14508

City:ST LOUIS

State:MO

Z

IP:63103

Country:US

Info Phone Num:314-771-5765

Emergency Phone Num:414-273-3850 EXT 5996

Resp. Party Other MSDS Num.:VERSION 1.0

CAGE:21076

=== Contractor Identification ===

Company Name:SIGMA CHEMICAL CO SIGMA DIAGNOSTICS DIV

Address:3050 SPRUCE ST

Box:City:ST LOUIS

State:MO

ZIP:63103-2530

Country:US

Phone:314-771-5765

Contract Num:SP0450-00-M-SJ74

CAGE:0DK69

Company Name:SIGMA CHEMICAL COMPANY

Address:3050 SPRUCE ST

Box:14508

City:ST LOUIS

State:MO

ZIP:63178

Country:US

Phone:314-771-5765

CAGE

:21076

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

Ingred Name:DI(ETHYLENE GLYCOL) METHYL ETHER (DOWANOL DM)
CAS:111-77-3
RTECS #:KL6125000
= Wt:99.

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

LD50 LC50 Mixture:ORAL-RAT LD50: 4 ML/KG.
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Health Hazards Acute and Chronic:SKIN CONTACT: MAY CAUSE SKIN
IRRITATION. EYE CONTACT: CAUSES EYE IRRITATION. INHALATION:
MATERIAL MAY BE IRRITATI
NG TO MYCOUS MEMBRANES AND UPPER
RESPIRATORY TRACT. TARGET ORGANS: LIVER, KIDNEYS, TEST ES.
Explanation of Carcinogenicity:NOT PROVIDED BY RESPONSIBLE PARTY.
Effects of Overexposure:SKIN CONTACT: MAY CAUSE SKIN IRRITATION. EYE
CONTACT: CAUSES EYE IRRITATION. INHALATION: MATERIAL MAY BE
IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.
Medical Cond Aggravated by Exposure:NOT PROVIDED BY RESPONSIBLE PARTY.

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

First Aid:IMMEDIATE TREATMENT-WORK SITE: 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.
ORAL EXPOSURE: I F SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED
PERSON IS CONSCIOUS. CALL A PHYSICIAN. INHALATION EXPOSURE: IF
INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL
RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.

=====
Fire Fightin
g Measures
=====

Flash Point:=87.C, 188.6F
Autoignition Temp:=221.C, 429.8F
Lower Limits:1.38
Upper Limits:NA
Extinguishing Media:CARBON DIOXIDE, DRY CHEMICAL POWDER, OR APPROPRIATE
FOAM.
Fire Fighting Procedures:WEAR SELF-CONTAINED BREATHING APPARATUS AND
PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.
Unusual Fire/Explosion Hazard:NOT PROVIDED BY RESPONSIBLE PARTY.

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

Spill Release Procedure

s:PROCEDURE(S) OF PERSONAL PRECAUTION(S): WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS, AND HEAVY RUBBER GLOVES. METHODS FOR CLEANING UP: ABSORB ON SAND OR VERMICULITE AND PLACE IN CLOSED CONTAINERS FOR DISPOSAL. VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

Neutralizing Agent:NOT PROVIDED BY RESPONSIBLE PARTY.

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

Handling and Storage Precautions:HANDLING: DO NOT BREATHE VAPOR. DO NOT

GET IN EYES, ON SKIN, ON CLOTHING. AVOID PROLONGED OR REPEATED EXPOSURE. STORAGE: KEEP TIGHTLY CLOSED. KEEP AWAY FROM HEAT AND OPEN FLAME. STORE IN A COOL DRY PLACE.

Other Precautions:NOT PROVIDED BY RESPONSIBLE PARTY.

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

Respiratory Protection:WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR.

Ventilation:USE ONLY IN A CHEMICAL FUME HOOD.

Protective Gloves:CHEMICAL-RESISTANT GLOVES.

Eye Protection:SAFETY GOGGLES.

Other Protective Equipment:OTHER PROTECTIVE CLOTHING. SAFETY SHOWER AND EYE BATH.

Work Hygienic Practices:WASH THOROUGHLY AFTER HANDLING.

Supplemental Safety and Health

NOT PROVIDED BY RESPONSIBLE PARTY.

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

HCC:V4

Boiling Pt:>190.C, 374.F

B.P. Text:190-194C

Melt/Freeze Pt:=-70.C, -94.F

Vapor Pres:0.2 MM HG

Vapor Density:4.14 G/L

Appearance and Odor:CLEAR LIQUID, VERY FAINTLY YELLOW-GREEN

===== Stability and Re

activity Data =====

Stability Indicator/Materials to Avoid: YES

OXIDIZING AGENTS.

Stability Condition to Avoid: NOT PROVIDED BY RESPONSIBLE PARTY.

Hazardous Decomposition Products: CARBON MONOXIDE, CARBON DIOXIDE.

Conditions to Avoid Polymerization: WILL NOT OCCUR.

===== Toxicological Information =====

Toxicological Information: ORAL-RAT 4 ML/KG (LD50), REMARKS: AUTONOMIC NERVOUS SYSTEM-OTHER DIRECT PARASYMPATHMIMETIC.

BEHAVIORAL-SOMNOLESCENCE (GEN

ERAL DEPRESSED ACTIVITY); LUNGS,

THORAX OR RESPIRATORY CYANOSIS. ORAL-MOUSE 8, 222 MG/KG (LD50);

REMARKS: AUTONOMIC NERVOUS SYSTEM-OTHER DIRECT PARASYMPATHMIMETIC.

BEHAVIORAL-SOMNOLESCENCE (GENERAL DEPRESSED ACTIVITY); LUNGS,

THORAX OR RESPIRATORY CYANOSIS. IRRITATION DATA: EYES -RABBIT: 500

MG, REMARKS: MODERATE IRRITATION EFFECT. CHRONIC

EXPOSURE-TERATOGEN: RAT, 6600 MG/KG, ORAL, 7-17 D PREG, RESULTS:

METERNAL-PARTURITION. EFFECTS ON FERTILITY-POST IMPLANTATION

MORTALITY.

===== Ecological Information =====

Ecological: NOT PROVIDED BY RESPONSIBLE PARTY.

===== Disposal Considerations =====

Waste Disposal Methods: THIS COMBUSTIBLE MATERIAL MAY BE BURNED IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER. OBSERVE ALL FEDERAL, STATE, AND LOCAL ENVIRONMENTAL REGULATIONS.

===== MSDS Transport Information =====

Transport Information: DO

T PROPER SHIPPING NAME: NONE. NON-HAZARDOUS FOR

TRANSPORT: THIS SUBSTANCE IS CONSIDERED TO BE NON-HAZARDOUS FOR

TRANSPORT.

===== Regulatory Information =====

SARA Title III Information: SARA 313 LISTED: NO.

Federal Regulatory Information: TSCA INVENTORY ITEM: YES.

State Regulatory Information: NOT PROVIDED BY RESPONSIBLE PARTY.

===== Other Information =====

Disclaimer (provided with this information by the compilin

g agencies):

This information is formulated for use by elements of the Department of Defense. The United States of America in no manner whatsoever, expressly or implied, warrants this information to be accurate and disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.