

UNION CARBIDE CORP., INDUSTRIAL CHEMICALS DIVISION -- MONOETHANOLAMINE --  
6810-00-922-0866

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

Product ID:MONOETHANOLAMINE

MSDS Date:07/27/1990

FSC:6810

NIIN:00-922-0866

MSDS Number: BFWKR

=== Responsible Party ===

Company Name:UNION CARBIDE CORP., INDUSTRIAL CHEMICALS DIVISION

Address:39 OLD RIDGEBURY ROAD

City:DANBURY

State:CT

ZIP:06817-0001

Country:US

Info Phone

Num:800-822-4357/ 203-794-3451

Emergency Phone Num:800-822-4357/PATRICIA CODY AT 203

CAGE:61637

=== Contractor Identification ===

Company Name:UNION CARBIDE CORP

Address:39 OLD RIDGEBURY ROAD

Box:City:DANBURY

State:CT

ZIP:06817-0001

Country:US

Phone:800-822-4357/732-563-5522 (MSDS)

CAGE:61637

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

Ingred Name:ETHANOLAMINE

CAS:141-43-5

RTECS #:KJ5775000

Fraction by Wt: 100%

Other REC Limits:NONE SPECIFIED

OSHA PEL:3 PPM/6 STEL

ACGI

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===== Hazards Identification =====  
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Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:ACUTE-INHALATION:IRRITATING & CAUSE  
COUGHING & DISCOMFORT IN THE NOSE,THROAT & CHEST.SKIN:CAUSES  
PAIN,SWELLING & BURNS.EYES:LIQUID CAUSES SEVERE  
IRRITATION,PAIN,TEARING,REDNESS,SWELLING & CHEMICAL BUR  
NS.INGESTION:MAY CAUSE CHEMICAL BURNS  
OFM  
OUTH,ESOPHAGUS,PAIN,DIZZINESS,VOMITING & COMA.CHRONIC-KIDNEY &  
LIVER DAMAGE.  
Effects of Overexposure:SEE HEALTH HAZARDS SECTION.  
Medical Cond Aggravated by Exposure:MAY AGGRAVATE AN EXISTING  
DERMATITIS, ASTHMA & INFLAMMATORY OR FIBROTIC PULMONARY DISEASE.

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===== First Aid Measures =====  
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First Aid:CALL A PHYSICIAN IN ALL CASES.INHALATION:REMOVE TO FRESH  
AIR.GIVE CPR/OXYGEN IF NEEDED.EYES:FLUSH WITH WATER FOR 15  
MINUTES.SKIN:WASH WITH SOAP & W  
ATER.INGESTION:DON'T INDUCE  
VOMITING.IF CONSCIOUS,DRI NK AT LEAST TWO GLASSES OF MILK/WATER.

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===== Fire Fighting Measures =====  
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Flash Point Method:TCC  
Flash Point:185F,85C  
Extinguishing Media:LARGE FIRE:ALCOHOL-TYPE/ALL-PURPOSE-TYPE FOAMS BY  
MANUFACTURERS' RECOMMENDED TECHNIQUES.SMALL FIRE:CO2 OR DRY  
CHEMICAL.  
Fire Fighting Procedures:USE NIOSH APPROVED SELF-CONTAINED BREATHING  
APPARATUS,EYE PROTECTION & PROTECTIVE CLOTHING.DON'T DIRECT A SOLID  
STREAM OF WATER/FOAM INTO HOT,BURNING POOLS.  
Unusual Fire/Explosion Hazard:OXIDES OF NITROGEN WILL BE EVOLVED.

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===== Accidental Release Measures =====  
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Spill Release Procedures:WEAR SUITABLE PROTECTIVE EQUIPMENT; AVOID  
CONTACT WITH LIQUID & VAPORS! COLLECT FOR DISPOSAL. TOXIC TO  
AQUATIC LIFE; AVOID DISCHARGE TO NATURAL WATERS.  
Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

and Storage Precautions:STORAGE-STORE IN A COOL, DRY & VENTILATED AREA AWAY FROM HEAT & FLAMES.KEEP CONTAINER CLOSED.  
Other Precautions:DANGER! CAUSES EYE & SKIN BURNS.HARMFUL IF INHALED, ABSORBED THROUGH SKIN, SWALLOWED.COMBUSTIBLE.REPEATED EXPOSURE MAY CAUSE LIVER & KIDNEY DAMAGE.ASPIRATION MAY CAUSE LUNG DAMAGE.DON'T GET IN EYES, ON SKIN, ON CLOTHING.AVOID BREATHING VAPOR.

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

Respiratory Protection:USE NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS WITH ORGANIC VAPOR FILTER.  
Ventilation:GENERAL(MECHANICAL) ROOM VENTILATION IS ADEQUATE.LOCAL VENTILATION IF VAPORS CAN BE EXPECTED TO ESCAPE TO THE WORKPLACE.  
Protective Gloves:PVC-COATED OR RUBBER  
Eye Protection:MONOGOGGLES  
Other Protective Equipment:EYE BATH, SAFETY SHOWER AND CHEMICAL APRON  
Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES. WASH THOROUGHLY AFTER HANDLING.  
Supplemental Safety and Health

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

HCC:B2  
Boiling Pt:=171.1C, 340.F  
Melt/Freeze Pt:M.P/F.P Text:52.0F, 11.1C  
Vapor Pres:0.2  
Vapor Density:2.1  
Spec Gravity:1.018  
Evaporation Rate & Reference: