

E F HOUGHTON & CO -- HOUGHTO-SAFE 273 -- 9150-01-080-5961

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

Product ID:HOUGHTO-SAFE 273

MSDS Date:10/06/1995

FSC:9150

NIIN:01-080-5961

MSDS Number: BTQZQ

=== Responsible Party ===

Company Name:E F HOUGHTON & CO

Address:MADISON AND VAN BUREN AVE

Box:930

City:VALLEY FORGE

State:PA

ZIP:19482

Country:US

Info Phone Num:215-666-4105

Emergency Phone Num:(800)424-9300

Pre

parer's Name:ROBERT E. WILLIAMS

Chemtec Ind/Phone:(800)424-9300

CAGE:73227

=== Contractor Identification ===

Company Name:HOUGHTON INTERNATIONAL INC

Box:930

City:VALLEY FORGE

State:PA

ZIP:19482

Country:US

Phone:610-666-4105

CAGE:73227

Company Name:HOUGHTON INTERNATIONAL INC

Address:MADISON AND VAN BUREN AVES

Box:930

City:VALLEY FORGE

State:PA

ZIP:19482-0930

Country:US

Phone:610-666-4105

CAGE:73277

Company Name:OCTAGON PROCESS INC.

Address:596 RIVER ROAD

Box:City:EDGEWATER

State:NJ

ZIP:07020

Cou

ntry:US
Phone:201-945-9400
CAGE:82925
Company Name:SDB CONSULTANTS LTD
Address:401 WHITNEY AVE SUITE 120
Box:City:GRETNA
State:LA
ZIP:70056
Country:US
Phone:504-366-9105
Contract Num:SP0450-01-M-C574
CAGE:0PGK2

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

Ingred Name:ETHYLENE GLYCOL
CAS:107-21-1
RTECS #:KW2975000
Minumum % Wt:30.
Maxumum % Wt:60.
Other REC Limits:C 100 MG/M3 (MFR)
OSHA PEL:NOT PROVIDED
ACGIH STEL:C127 MG/M3;C50 PPM
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

In
gred Name:2-DIETHYLAMINOETHANOL
CAS:100-37-8
RTECS #:KK5075000
< Wt:1.
Other REC Limits:NOT PROVIDED
OSHA PEL:50 MG/M3;10 PPM
ACGIH TLV:9.6 MG/M3;2 PPM

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

LD50 LC50 Mixture:NOT PROVIDED
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:ACUTE EFFECTS: INHALATION: AVOID
BREATHING PRODUCT MISTS. BREATHING MISTS IN EXCESS OF THE STEL

MAY

CAUSE IRRITATION OF UPPER RESPIRATORY TRACT. PERSONS WITH CHRONIC RESPIRATORY DISEASE MAY SHOW INCREASED SYMPTOMS DUE TO IRRITATION. SKIN: MILD IRRITANT. EYES: MODERATE IRRITANT. INGESTION: AVOID INGESTION, SWALLOWING LARGE AMOUNTS OF ETHYLENE GLYCOL HAS CAUSED BIRTH DEFECTS IN LABORATORY ANIMALS. CHRONIC (RECURRENT) EFFECTS: UNKNOWN FOR THIS PRODUCT.

Explanation of Carcinogenicity:NOT CARCINOGENIC.

Effects of Overexposure:NOT PROVIDED

Medical Condition Aggravated by Exposure:

PERSONS WITH CHRONIC RESPIRATORY

DISEASE MAY SHOW INCREASED SYMPTOMS DUE TO IRRITATION.

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

First Aid:INHALATION: REMOVE TO SOURCE OF FRESH AIR. SKIN: WASH WITH SOAP AND WATER. EYES: FLUSH WITH WATER 15 MINUTES; CONSULT PHYSICIAN. INGESTION: INDUCE VOMITING; CONSULT PHYSICIAN.

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

Extinguishing Media:PRODUCT IS A FIRE RESISTANT FLUID; NOT FLAMMABLE AS USED.

Fire Fighting Procedures:IF WATER IS REMOVED, PRODUCT WILL BURN. USE WATER, CARBON DIOXIDE, FOAM, DRY CHEMICAL.

Unusual Fire/Explosion Hazard:NONE.

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

Spill Release Procedures:MATERIAL IS NOT CONSIDERED A POLLUTANT IF EFFECTIVE WASTE DISPOSAL METHODS ARE UTILIZED. FLUSH AREA WITH WATER FOR SMALL QUANTITIES; FOR LARGE QUANTITIES, DIKE TO CONTAIN AND EITHER REUSE OR DISPOSE OF DEPENDING ON CONDITIONS.

Neutralizing Agent:NOT RELEVANT

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

Handling and Storage Precautions:AVOID CONTACT WITH STRONG OXIDIZERS. AVOID INGESTION.

Other Precautions:WASH THOROUGHLY AFTER HANDLING.

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

Respiratory Protection:REQUIRED ONLY IF TLV IS EXCEEDED.

Ventilation:EXHAUST TYPE IF MISTING; OTHERWISE GENERAL TYPE IS SATISFACTORY.

Protective Gloves:RUBBER FOR PROLONGED CONTACT

IF SKIN IS SENSITIVE.

Eye Protection:SAFETY GOGGLES OR SAFETY GLASSES WITH SIDE SHIELDS.

Other Protective Equipment:NOT REQUIRED.

Work Hygienic Practices:NOT PROVIDED

Supplemental Safety and Health

ABBREVIATION: N/A=NOT APPLICABLE OR NOT AVAILABLE. N/K=UNKNOWN. N/P=NOT PROVIDED. N/R=NOT RELEVANT. N/D=NOT DETERMINED. N/E=NOT ESTABLISHED.

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

HCC:V6

NRC/State Lic Num:NOT RELEVANT

Boiling Pt:=101.7C, 215.F

Melt/Freeze Pt:M.

P/F.P Text:NOT PROVIDED

Decomp Temp:Decomp Text:NOT PROVIDED

Vapor Pres:AS WATER

Vapor Density:AS WATER

Spec Gravity:1.08

pH:9.5

Viscosity:NOT PROVIDED

Evaporation Rate & Reference:AS WATER

Solubility in Water:COMPLETE

Appearance and Odor:RED FLUID, SLIGHT AMMONIACAL ODOR.

Percent Volatiles by Volume:30-60

Corrosion Rate:NOT PROVIDED

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

STRONG OXIDIZERS.

Stability Condition to Avoid:

NOT PROVIDED

Hazardous Decomposition Products:THERMAL: OXIDES OF CARBON AND NITROGEN.

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

Toxicological Information:NOT PROVIDED

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

Ecological:NOT PROVIDED

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

Waste Disposal Methods:PROCESS THROUGH SEWAGE OR WASTE DISPOSAL SYSTEM WHICH PROVIDES BIOLOGICAL OXIDATION. (IF WATER CONTENT IS BELO

W
35%, MATERIAL MAY BE BURNED WITH FUEL OILS.)

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

Transport Information:NOT PROVIDED

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

SARA Title III Information:THIS PRODUCT CONTAINS NO TOXIC CHEMICAL
SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III
OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1985 AND 40
CFR PART 372 OTHER THAN A M AXIMUM OF : 35% ETHYLENE GLYCOL
(CAS
107-21-1)..

Federal Regulatory Information:NOT PROVIDED

State Regulatory Information:NONE

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

Disclaimer (provided with this information by the compiling 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 uti
lizing this
document should seek competent professional advice to verify and
assume responsibility for the suitability of this information to their
particular situation.