

OCTAGON PROCESS INC. -- MIL-A-53009 AM. 3 ANTIFREEZE EXTENDER -- 6850-01-160-3868  
===== Product Identification =====

Product ID:MIL-A-53009 AM. 3 ANTIFREEZE EXTENDER

MSDS Date:12/13/1991

FSC:6850

NIIN:01-160-3868

MSDS Number: BRDKY

=== Responsible Party ===

Company Name:OCTAGON PROCESS INC.

Address:596 RIVER ROAD

City:EDGEWATER

State:NJ

ZIP:07020-1105

Country:US

Info Phone Num:201-313-1187

Emerge

ncy Phone Num:201-945-9400/800-424-9300(CHEMTREC)

Preparer's Name:J.J. BURGARD

CAGE:82925

=== Contractor Identification ===

Company Name:OCTAGON PROCESS INC.

Address:596 RIVER ROAD

Box:City:EDGEWATER

State:NJ

ZIP:07020

Country:US

Phone:201-945-9400

CAGE:82925

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

Ingred Name:SODIUM HYDROXIDE (SARA III)

CAS:1310-73-2

RTECS #:WB4900000

Fraction by Wt: 3-5%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:2 MG/M3

ACGIH TLV:C 2 MG/M3; 929

EPA Rpt Qty:1000 LBS  
DOT Rpt Qty:1000 LBS

Ingred Name:SODIUM TETRABORATE, ANHYDROUS  
CAS:1330-43-4  
RTECS #:VZ2240000  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:10 MG/M3  
ACGIH TLV:1 MG/M3; 9293

Ingred Name:SODIUM MERCAPTOBENZOTHIAZOLE  
CAS:2492-26-4  
RTECS #:DL6825000  
Other REC Limits:NONE RECOMMENDED

Ingred Name:POTASSIUM SILICATE  
CAS:1312-76-1  
Other REC Limits:NONE RECOMMENDED

Ingred Name:WATER  
CAS:7732-18-5  
RTECS #:ZC0110000  
Other REC Limits:NONE RECOMMENDED

=====  
Identification =====

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:ACUTE: CONTACT MAY CAUSE EYE AND SKIN IRRITATION. INHALATION MAY CAUSE UPPER RESPIRATORY TRACT IRRITATION. INGESTION MAY CAUSE GASTROINTESTINAL SYSTEM IRRITATION. CHRONIC: NONE SPECIFIED BY MANUFACTUR ER.  
Effects of Overexposure:EYES/SKIN: REDNESS, IRRITATION, BURNS. INHALATION: IRRITATION AND BURNS TO UPPPER RESPIRATORY SYSTEM, COUGHING, SHORTNESS OF BREATH. INGESTION: PAIN, NAUSEA, VOMITING, GASTROINTESTINAL IRRITATION.  
Medical Cond Aggravated by Exposure:NOT KNOWN.

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

First Aid:EYES/SKIN: FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. IF IRRITATION PERSISTS, SEE DOCTOR. INHALATION: REMOVE TO FRESH AIR. GIVE OXYGEN/CPR IF NEEDED. GET IMMEDIATE MEDICAL ATTENTION. I NGESTION: GIVE 1 GLASS OF MI

LK OR WATER. GET IMMEDIATE  
MEDICAL ATTENTION.

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

Flash Point:NONE

Extinguishing Media:USE WATER FOG, CARBON DIOXIDE, FOAM, OR DRY  
CHEMICAL.

Fire Fighting Procedures:WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A  
FULL FACED SELF CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED  
CONTAINERS WITH WATER SPRAY.

Unusual Fire/Explosion Hazard:NONE

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

Spill

Release Procedures:WEAR PROTECTIVE EQUIPMENT. NEUTRALIZE WITH  
MURIATIC OR ACETIC ACID. ABSORB WITH INERT MATERIAL AND PLACE IN  
APPROPRIATE DISPOSAL CONTAINER FOR DISPOSAL. FLUSH AREA WITH LARGE  
AMOUNTS OF WATER.

Neutralizing Agent:DILUTED MURIATIC OR ACETIC ACIDS.

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

Handling and Storage Precautions:STORE IN COOL DRY PLACE AWAY FROM  
OXIDIZERS. KEEP CONTAINERS CLOSED WHEN NOT IN USE.

Other Precautions:THIS MATERIAL  
IS CORROSIVE (ALKALINE). AVOID EYE/SKIN  
CONTACT AND PROLONGED AND/OR REPEATED BREATHING OF VAPORS.

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

Respiratory Protection:FOR MISTS CONDITIONS, USE A NIOSH-APPROVED  
RESPIRATOR FOR MISTS.

Ventilation:MECHANICAL (GENERAL) VENTILATION AND/OR LOCAL EXHAUST THAT  
WOULD PROVIDE ADEQUATE VENTILATION.

Protective Gloves:RUBBER OR NEOPRENE.

Eye Protection:GOGGLES, AND FACESHIELD IF SPLASHING.

Other Protective Equipment:APRON.

EYE WASH STATION AND SAFETY SHOWER.

Work Hygienic Practices:WASH THOROUGHLY AFTER HANDLING AND BEFORE  
SMOKING OR EATING.LAUNDER CONTAMINATED CLOTHING.DISCARD  
CONTAMINATED SHOES.

Supplemental Safety and Health  
NONE

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

HCC:B3

Boiling Pt:B.P. Text:212F,100C

Spec Gravity:1.2

pH:12

Solubility in Water:COMPLETE

Appearance and Odor:CLEAR LIQUID SOLUTION, PRACTICALLY ODORLESS.

===== Stability and Reactivity Data

=====

Stability Indicator/Materials to Avoid: YES  
STRONG ACIDS, STRONG OXIDIZERS.  
Stability Condition to Avoid: NONE  
Hazardous Decomposition Products: NONE

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

Waste Disposal Methods: CONTACT YOUR LOCAL ENVIRONMENTAL OFFICER.  
DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND  
LOCAL REGULATIONS.

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 utilizing this  
document should seek competent professional advice to verify and  
assume responsibility for the suitability of this information to their  
particular situation.