EMERSON & CUMING -- CATALYST 9 -- 8040-00-132-0317

Product ID:CATALYST 9 MSDS Date:06/12/1995

FSC:8040

NIIN:00-132-0317

MSDS Number: CFCZX === Responsible Party ===

Company Name: EMERSON & CUMING

Address:77 DRAGON COURT

City:WOBURN,

State:MA ZIP:01888 Country:US

Info Phone Num:800-424-9300 (CHEMTREC)

Emergency Phone Num:800-424-9300 (CHEMTREC)

Preparer's Name: DAVID HAAS

CAGE:0VVR7

=== Contractor Identification ===

Company Name

:EMERSON & CUMING INC Address:77 DRAGON COURT

Box:City:WOBURN

State:MA ZIP:01888 Country:US

Phone:617-935-4850;617-938-8630

CAGE:0VVR7

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

Ingred Name: TETRAETHYLENE PENTAMINE

CAS:112-57-2

RTECS #:KH8585000 Fraction by Wt: 60-70%

Other REC Limits: NONE RECOMMENDED

Ingred Name:TRIETHYLENE-TETRAMINE

CAS:26950-63-0

Fraction by Wt: 20-30%

Other REC Limits: NONE RECOMMENDED

Ingred Name: PENTAETHYLENE HEXAMINE

Fraction by Wt: 10.0%

Other

REC Limits:NONE RECOMMENDED Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic:EYE: CORROSION, (BURN, CORNEAL INJURY, BLINDNESS). SKIN: CORROSION, BURN, BLISTER, SENSITIZATION, ALLERGIC REACTION, ABSORPTION. INHAL: IRRITATION, NAUSEA, HEADACHE, SENSITIZATION, (TIGHTNESS OF CHEST, ASTHMA-LIKE SYMPTOMS, RESPIRATORY DIST RESS). INGEST: BURNS. Medical Cond Aggravated by Exposure: SKIN, EYE & RESPIRATORY DISORDERS. First Aid:EYE: IMMED FLUSH THOROUGHLY W/WATER FOR >15 MINUTES, LIFT LIDS. GET IMMED MED AID. SKIN: IMMED FLUSH W/PLENTY OF WATER. REMOVE CONTAM CLOTHES/SHOES. WASH W/SOAP & WATER. DONT SCRUB SKIN, GET IMMED MED AID. INHAL: GET FRESH AIR, SUPPORT BREATHING AS NEEDED, GET IMMED MED AID. INGEST: DONT INDUCE VOMIT, DRINK WATER. NEVER GIVE ANYTHING BY MOUTH TO DROWSY, UNCONSCIOUS, CONVULSING PERSON. GET MED AID. Flash Point:>200F,>93C Lower Limits:NE **Upper Limits:NE** Extinguishing Media: USE CARBON DIOXIDE, DRY CHEMICAL, FOAM, WATER FOG. Fire Fighting Procedures: WEAR POSITIVE PRESSURE SCBA & FULL PORTECTIVE EQUIPMENT. COOL FIRE EXPOSED CNTNRS W/WATER TO PREVENT PRESSURE BUILDUP. IF LARGE AMMOUNTS ARE INVOLVED EVACUATE. Unusual Fi re/Explosion Hazard: DECOMPOSITION & COMBUSTION PRODUCTS MAY BE TOXIC, CLOSED CONTAINER MAY RUPTURE IN FIRE. ========== Accidental Release Measures ==============

Spill Release Procedures: VENTILATE AREA. WIPE UP. ABSORB. WASH W/SOAPY WATER. CONTAINERIZE. LARGE SPILL: EVACUATE AREA. STOP SPILL IF SAFE. VENTILATE AREA. DIKE. CONTAINERIZE. ABSORB RESIDUE. WASH AREA W/SOAPY WATER. CONTAINE RIZE.

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

Hand

ling and Storage Precautions: KEEP CONTAINER CLOSED WHEN NOT IN USE & AWAY FROM IGNITION SOURCES, CURING AGENTS & OTHER INCOMPATIBLE MATERIALS. Other Precautions:STORE IN COOL, DRY PLACE W/GOOD VENTILATION. ===== Exposure Controls/Personal Protection ======== Respiratory Protection: USE APPROPRIATE PROPERLY FITTED RESPIRATOR. (SCBA OR AIR-PURIFYING). Ventilation: MECHANICAL EXHAUST Protective Gloves:NITRILE. Eye Protection: SPLASH-PROOF GOGGLES, FACE SHIELD. Other Protec tive Equipment: CHEMICAL RESISTANT APRON, IMPERVIOUS CLOTHING. Work Hygienic Practices: WASH CLOTHES BEFORE REUSE. DESTROY LEATHER GOODS. WASH HANDS/FACE AFTER HANDLING & BEFORE EATING, DRINKING OR SMOKING. Supplemental Safety and Health NK ========= Physical/Chemical Properties ============ Boiling Pt:B.P. Text:604F,318C Vapor Pres:AIR. Spec Gravity:0.99 Solubility in Water:SOLUBLE.

Appearance and Odor: AMBER LIQUID, AMINE ODOR.

Percent Volatiles by Volume:NE

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

Stability Indicator/Materials to Avoid:YES

STRONG OXIDIZERS, ACIDS, BASES & EPOXIDES.

Hazardous Decomposition Products:CO, CO2, OXIDES OF NITROGEN, AMINES & OTHER ORGANIC SUBSTANCES.

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