

EMERSON & CUMING INC -- CATALYST 9 -- 8040-01-349-6630

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

Product ID:CATALYST 9
MSDS Date:06/12/1995
FSC:8040
NIIN:01-349-6630
Kit Part:Y
MSDS Number: CBQYM
=== Responsible Party ===
Company Name:EMERSON & CUMING INC
Address:77 DRAGON COURT
City:WOBURN
State:MA
ZIP:01888
Country:US
Info Phone Num:617-861-9600; 617-828-3300
Emergency Phone Num:202-483-7616;800-424-9
300(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 / TALL OIL FATTY ACID POLYMER
CAS:68513-05-3
Fraction by Wt: 60-70%
OSHA PEL:N/K
ACGIH TLV:N/K

Ingred Name:TRIETHYLENE TETRAMINE
Fraction by Wt: 20-30%
OSHA

PEL:N/K
ACGIH TLV:N/K

Ingred Name:PENTAETHYLENE HEXAMINE
CAS:4067-16-7
RTECS #:RZ2680000
Fraction by Wt: 10%
OSHA PEL:N/K
ACGIH TLV:N/K

Ingred Name:SUPDAT: TO CAUSE LIVER & KIDNEY INJURY ON TESTS ON LAB
ANIMALS.
RTECS #:9999999ZZ

Ingred Name:FIRST AID PROC: CONTAMD LEATHER ARTICLES, INCL SHOES,
CANNOT BE DECONTAMD & SHOULD BE DESTROYED. INHAL:REMOVE TO (ING 6)
RTECS #:9999999ZZ

Ingred Name:ING 5: FRESH AIR. PROVIDE OXYGEN IF BRTHG IS DFCLT. GIVE
ARTF RESP IF NOT BRTHG. GET IM
MED MED ATTN. INGEST: DO (ING 7)
RTECS #:9999999ZZ

Ingred Name:ING 6: NOT INDUCE VOMIT. IF CONSCIOUS & ALERT, DILUTE BY
GIVING WATER TO DRINK; NEVER GIVE ANYTHING BY MOUTH TO (ING 8)
RTECS #:9999999ZZ

Ingred Name:ING 7: DROWSY, UNCON OR CONVULSING PERSON. GET IMMED MED
ATTN.
RTECS #:9999999ZZ

Ingred Name:SPILL PROC: VERMICULITE/OTHER SIMILAR MATL. WASH AREA
W/SOAPY WATER TO REMOVE RESIDUE. COLLECT ABSORBED MATL & (ING 10)
RTECS #:9999999ZZ

Ingred Name:ING 9:WATER RINSES IN APPROP
CNTNRS. LG SPILLS:LIM ACCESS
TO IMMED SPILL AREA. SHUT OFF SOURCE OF RELS IF W/OUT (ING 11)
RTECS #:9999999ZZ

Ingred Name:ING 10: RISK OF INJURY. ACTIVATE AVAIL EXHST VENT SYS IN
AREA. DIKE AREA TO CNTN SPILL & PVNT RELS TO SEWERS, (ING 12)
RTECS #:9999999ZZ

Ingred Name:ING 11: DRAINS OR OTHER WATERWAYS. COLLECT SPILLED MATL FOR
SALVAGE/DISP. APPLY ABSORB MATL TO SOAK UP RESIDUE. (ING 13)
RTECS #:9999999ZZ

Ingred Name:ING 12: WASH AREA W/SOAPY WATER. PVNT RUNOFF FROM ENTERING

WATERWAYS. TRANSFER ABSORBED MATL & WATER RINSES TO (ING 14)
RTECS #:9999999ZZ

Ingred Name:ING 13: APPROP WASTE CONTAINERS.
RTECS #:9999999ZZ

Ingred Name:HNDLG/STOR PRECS: PRODUCT TECHNICAL BULLETIN FOR DETAILED
STORAGE INFORMATION.
RTECS #:9999999ZZ

Ingred Name:OTHER PRECS: IN INTENDED USAGE CNDTNS & EQUIP. EMPLOYEES
MUST BE PROPERLY TRAINED IN SAFE HNDLG OF PROD PRIOR (ING 17)
RTECS #:9999999ZZ

Ingred Name:ING 16: TO USE. THIS PROD CAN CAUSE EYE BURNS, SKIN BURNS
AND MAY CAUSE
ALLERGIC SKIN RESPONSES. COMPONENTS OF (ING 18)
RTECS #:9999999ZZ

Ingred Name:ING 17: THIS PRODUCT MAY ALSO BE ABSORBED THROUGH THE SKIN.
RTECS #:9999999ZZ

Ingred Name:RESP PROT: ENGINEERING CTLS & PERSONAL PROT EQUIP MAY NOT
BE SUFFICIENT TO PROTECT PERS ALREADY SENSITIZED TO THIS MATL.
RTECS #:9999999ZZ

Ingred Name:VENT: TO PVNT ROUTINE INHAL. VENT MUST BE SUFFICIENT TO
PVNT RESP IRRIT, AS VAPS CAN PRDCE IRRIT & MAY CAUSE (ING 21)
RTECS #:9999999ZZ

Ingred Name:ING 20: ALLERGIC RES
PIRATORY REACTIONS/SENSITIZATION.
RTECS #:9999999ZZ

Ingred Name:EYE PROT: & FULL LENGTH FACESHIELD .
RTECS #:9999999ZZ

Ingred Name:OTHER PROT EQUIP: ALL SKIN CONTACT, CONTAMINATION OF
CLOTHING & POSSIBLE ABSORPTION THROUGH SKIN.
RTECS #:9999999ZZ

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

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards A

cute and Chronic:EYE CNTCT: CNTNS MATLS CORR TO EYES;
MAY CAUSE BURNS & POSS CORNEAL INJURY. PERM IMPAIRMENT OF VISION OR
BLINDNESS MAY OCCUR. SKIN CNTCT: CNTNS MATLS CORR TO SKIN; MAY
CAUSE SEV BURNS & BLISTERING. PR OD MAY CAUSE SKIN SENSIT/ALLERGIC
SKIN RXNS WHICH MAY BE SEV IN CERTAIN INDIVIDUALS. MAY BE HARMFUL
IF (EFTS OF OVEREXP)

Explanation of Carcinogenicity:NOT RELEVANT

Effects of Overexposure:HLTH HAZ:ABSORBED THRU SKIN. INHAL: VAPS MAY
CAUSE IRRIT, NAUS & HDCH

S. MAY CAUSE RESP SENSIT RESPONSES IN
SUSCEPTIBLE INDIVIDUALS. SYMPS MAY INCL TIGHTNESS OF CHEST,
ASTHMA-LIKE SYMPS, RESP DISTRESS. INGEST: HARMFUL IF SWALLOWED.
MAY CAUSE BURNS TO MOUTH & UPPER GI TRACT. CHRONIC: RPTD OVEREXP TO
POLYETHYLENE (SUPDAT)

Medical Cond Aggravated by Exposure:EXPOSURE MAY AGGRAVATE PREEXISTING
SKIN, EYE AND/OR RESPIRATORY DISORDERS.

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

First Aid:EYES: IMMED FLUSH THORO W/WATER FOR
AT LEAST 15 MIN WHILE
HOLDING LIDS OPEN. GET IMMED MED ATTN. SKIN: IMMED FLUSH AFFECTED
AREA OF SKIN W/PLENTY OF WATER WHILE REMOVING CONTAMD CLTHG/SHOES.
FOLLOW BY THORO WASHING W/SOAP & WATER. AVOID SCRUBBING AS THIS
ACTION COULD INCR SKIN ABSORPTION & WORSEN EFT OF CHEM CNTCT. GET
IMMED MED ATTN. DO NOT REUSE CONTAMD CLTHG UNTIL PROPERLY CLEANED.
(ING 5)

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

Flash Point:>200F,>93C

Extinguishing Media:

USE CARBON DIOXIDE, DRY CHEMICAL, FOAM, WATER FOG.

Fire Fighting Procedures:USE NIOSH APPRVD SCBA & FULL PROT EQUIP . COOL
EXPOS CNTNRS W/WATER TO PVNT PRESS BUILDUP. IF LG QTYS OF MATL ARE
INVOLVED, EVACUATE AREA & FIGHT (SUPDAT)

Unusual Fire/Explosion Hazard:DECOMPOSITION AND COMBUSTION PRODUCTS MAY
BE TOXIC. CLOSED CONTAINERS MAY VIOLENTLY RUPTURE UNDER FIRE
CONDITIONS.

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

Spill Release Procedures:SPILL RESPONS

E OPERATIONS MUST BE CONDUCTED

I/A/W PROVISIONS OF OSHA 29 CFR 1910.120. REVIEW ENTIRE MSDS BEFORE PROCEEDING W/SPILL RESPONSE. SM SPILLS: ACTIVATE AVAIL EXHST VENT EQUIP IN IMMED SPILL A REA. WIPE UP/ABSORB SPILLED MATL WITH (ING 9)

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:STORE IN A COOL, DRY LOCATION W/ADEQ VENT. KEEP CNTNR TIGHTLY SEALED WHEN NOT IN USE. KEEP A WAY FROM

OPEN FLAMES & HEAT SOURCES. CONSULT (ING 15)

Other Precautions:RECOMS DESCRIBED IN HNDLG PRECS ARE PROVIDED AS GEN GUIDANCE FOR MINIMIZING EXPOS WHEN HNDLG PROD. BECAUSE USAGE CNDTNS WILL VARY DEPENDING ON CUSTOMER APPLICATN, SPECIFIC SAFE HNDLG PROCS SHOULD BE D EVELOPED BY PERSON KNOWLEDGEABLE(ING 16)

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

Respiratory Protection:USE AN APPROP, PROPERLY FITTED, NIOSH APPRVD RESP IF SYMPS TO EXPOS APPEA

R. TYPE OF RESP PROT SELECTED (SCBA,

AIR-PURIFYING, ETC) DEPENDS ON CNDTNS OF USE. OBSERVE OSHA REGS FOR RESP PROT (29 CFR 1910 .134). IT SHOULD BE NOTED THAT (ING 19)

Ventilation:PROVIDE EFTIVE MECH EXHST VENT TO DRAW VAPS, MISTS OR FUMES GENERATED DURING PROCESSING AWAY FROM WORKER & (ING 20)

Protective Gloves:APPROPRIATE PROTECTIVE NITRILE GLOVES.

Eye Protection:ANSI APPRVD CHEM WORKERS GOGGS (ING 22)

Other Protective Equipment:ANSI APPRVD EYE WASH & DELUGE SHOWER . WEAR PROPE

R CHEM RESIST APRON & ADDNL IMPERVIOUS CLTHG TO PVNT (ING 23)

Work Hygienic Practices:NORM WORK CLTHG SHOULD BE WASHED BEFORE REUSE. WASH HANDS & FACE THORO AFTER HNDLG PROD & BEFORE EATING/DRINKING/SMKNG.

Supplemental Safety and Health

FIRE FIGHT PROC: FIRE FROM A SAFE DIST. CNDTNS TO AVOID: OR EXPOS TO INCOMPAT SUBSTANCES. HAZ DECOMP PRODS: CHEM NATURE & QTY OF DECOMP BY-PRODS WILL VARY WIDELY DEPENDING ON CNDTNS OF COMBUST. EFTS O F OVEREXP: POLYAMINES (INCL DIETHYLENE TRI

AMINE, TRIETHYLENE

TETRAMINE & TETRAETHYLENE PENTAMINE) ARE REPORTED (ING 4)

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

Boiling Pt:B.P. Text:604F,318C

Vapor Pres: