

EMERSON & CUMING INC -- CATALYST 11 -- 8040-00-814-1128

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

Product ID:CATALYST 11
MSDS Date:03/30/1993
FSC:8040
NIIN:00-814-1128
MSDS Number: CCBFM
=== Responsible Party ===
Company Name:EMERSON & CUMING INC
Address:77 DRAGON COURT
City:WOBURN
State:MA
ZIP:01888
Country:US
Info Phone Num:617-928-3300
Emergency Phone Num:617-935-4850; 617-938-8630
Preparer's Name:DAV
ID 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:M-PHENYLENEDIAMINE; (M-PHENYLENE DIAMINE)
CAS:108-45-2
RTECS #:SS7700000
Fraction by Wt: 70-80%
OSHA PEL:N/K
ACGIH TLV:0.1 MG/M3

Ingred Name:2-PYRROLIDINONE, 1-METHYL-; (N-METHYL PYRROLIDONE)
CAS:872-50-4
RTECS #:UY

5790000
Fraction by Wt: 20-30%
OSHA PEL:N/K
ACGIH TLV:N/K

Ingred Name:VOLATILE ORGANIC COMPOUND: 540.5 G/L (EPA TEST METHOD 24)
RTECS #:9999999VO
OSHA PEL:N/K
ACGIH TLV:N/K

Ingred Name:SUPDAT:TEST ANIMALS INDICATE N-METHYL PYRROLIDONE MAY BE
EMBRYOTOX BY ORAL & INTERPERITONEAL ROUTES. TERTATOGENIC(ING 5)
RTECS #:9999999ZZ

Ingred Name:ING 4:EFTS HAVE RSLTD ONLY AT MATERNALLY TOX DOSAGE LEVELS.
THESE EFTS WERE NOT REPORTED AT DOSE LEVELS TOLERATED(ING 6)
RTECS #:9999999ZZ

Ingred Name:ING 5:BY MOTHER. EXPERIENCE TO DATE HAS NOT SHOWN
TERATOGENIC EFTS IN HUMANS. M-PHENYLENE DIAMINE MAY CAUSE LIVER(ING
7)
RTECS #:9999999ZZ

Ingred Name:ING 6:& KIDNEY EFTS AS REST OF SHORT INHAL, INGEST OR SKIN
EXPOS, BASED ON TESTS ON LAB ANIMALS. THIS CMPD HAS (ING 8)
RTECS #:9999999ZZ

Ingred Name:ING 7:BEEN DETERMD TO CAUSE MUTAGENIC CHGS IN CULTURED
BACTERIAL & MAMMALIAN CELLS; HOWEVER IT HAS NOT SHOWN ANY (ING 9)
RTECS #:9999999ZZ

Ingred Name:ING 8: CARCINOGENIC ACTIVIT
Y.
RTECS #:9999999ZZ

Ingred Name:FIRST AID PROC: DILUTE BY GIVING PLENTY OF WATER TO DRINK
IF CONSCIOUS & ALERT. NEVER GIVE ANYTHING BY MOUTH TO (ING 11)
RTECS #:9999999ZZ

Ingred Name:ING 10: DROWSY, UNCONSCIOUS OR CONVULSING PERSON. GET IMMED
ATTN.
RTECS #:9999999ZZ

Ingred Name:SPILL PROC: VERMICULITE/OTHER SIMILAR MATL. WASH AREA
W/SOAPY WATER TO REMOVE RESIDUE. COLLECT ABSORBED MATL & (ING 13)
RTECS #:9999999ZZ

Ingred Name:ING 12: WATER RINSES IN APPROP CNTNRS. LG SPILLS:LIM A

CCESS

TO IMMED SPILL AREA. SHUT OFF SOURCE OF RELS IF THIS(ING 14)
RTECS #:9999999ZZ

Inged Name:ING 13: CAN BE DONE W/OUT RISK OF INJURY. ACTIVATE AVAIL
EXHST VENT SYS IN AREA. DIKE AREA TO CNTN SPILL & PVNT (ING 15)
RTECS #:9999999ZZ

Inged Name:ING 14: RELEASES TO SEWERS, DRAINS OR OTHER WATERWAYS.
COLLECT SPILLED MATL FOR SALVAGE/DISP. APPLY ABSORB MATL (ING 16)
RTECS #:9999999ZZ

Inged Name:ING 15:TO SOAK UP RESIDUE. WASH AREA W/SOAPY WATER. PVNT
RUNOFF FROM ENTERING WATE
RWAYS. TRANSFER ABSORBED MATL (ING 17)
RTECS #:9999999ZZ

Inged Name:ING 16: & WATER RINSES TO APPROP WASTE CONTAINERS.
RTECS #:9999999ZZ

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

Inged Name:OTHER PRECS: INTENDED USAGE CNDTNS & EQUIP. EMPLOYEES MUST
BE PROPERLY TRAINED IN SAFE HNDLG OF PROD PRIOR TO (ING 20)
RTECS #:9999999ZZ

Inged Name:ING 19: USE. PROD CAN CAUSE SEV EYE IRRIT, SKIN IRRIT & MAY
CAUSE ALLERGIC SKIN RXNS
. COMPONENTS OF PROD MAY (ING 21)
RTECS #:9999999ZZ

Inged Name:ING 20: ALSO BE ABSORBED THRU SKIN.
RTECS #:9999999ZZ

Inged Name:VENT: PVNT ROUTINE INHAL. THIS IS NEC ESP DURING ELEVATED
TEMP PROCESSING. VENT MUST BE SUFFICIENT TO MAINTAIN (ING 23)
RTECS #:9999999ZZ

Inged Name:ING 22: AIRBORNE LEVELS OF LISTED INGREDIENTS BELOW THEIR
PEL/TLV VALUES.
RTECS #:9999999ZZ

Inged Name:PROT GLOVES: ROUTINE WORK; BUTYL RUBBER GLOVES ARE RECOM
FOR WORK WHERE DIRECT CNTCT W/LIQ IS MORE LIKEL

Y.
RTECS #:9999999ZZ

Ingred Name:OTHER PROT EQUIP: PREVENT SKIN CONTACT, CONTAMINATION OF
CLOTHING & POSSIBLE SKIN ABSORPTION.
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 Acute and Chronic:EYES:CNFNS MATLS SEV IRRIT TO EYES.
SYMPS MAY INCL BLURRED VISION, BURNING SENSATI
ON & TEARING.
SKIN:CNFNS MATLS WHICH CAUSE MOD IRRIT. PRLNGD/RPTD EXPOS TO LIQ
MAY EXERT DEFAT/DRYING ACTION ON SKIN, POSS RSLTG IN DERM. PROD
MAY CAUSE SKINSENSIT/ALLERGIC SKIN RXNS WHICH MAY BE SEV IN CERTAIN
PERS; (EFTS OF OVEREXP)
Explanation of Carcinogenicity:NOT RELEVANT
Effects of Overexposure:HLTH HAZ:SYMPS INCL RASH, ITCH, HIVES, SWELL OF
EXTREMITIES. MAY BE ABSORBED THRU SKIN. PROD MAY CAUSE TEMPORARY,
ORANGE-BROWN STAIN OF SKIN; NO ADVERSE EFTS ARE KNOWN TO R
SLT.
INHAL:HEATING CAN GENER ATE VAPS THAT MAY CAUSE RESP IRRIT, NAUS &
HDCH. INHAL HAZ AT ROOM TEMP IS UNLIKELY DUE TO LOW VOLAT OF PROD.
(SUPDAT)
Medical Cond Aggravated by Exposure:EXPOSURE MAY AGGRAVATE PREEXISTING
SKIN AND/OR EYE DISORDERS.

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

First Aid:EYE: FLUSH THORO W/WATER FOR AT LEAST 15 MIN WHILE HOLDING
EYELIDS OPEN. GET MED ATTN. SKIN: REMOVE ANY CONTAMD CLTHG & FLUSH
AREA THORO W/PLENTY OF
WATER. FOLLOW BY WASHING W/SOAP & WATER. GET
MED AT TN IF IRRIT PERSISTS. DO NOT REUSE CONTAMD CLTHG UNTIL
PROPERLY CLEANED. INHAL:REMOVE TO FRESH AIR. PROVIDE OXYGEN IF
BRTHG IS DFCLT. GIVE ARTF RESP IF NOT BRTHG. GET IMMED MED ATTN.
INGEST: (ING 10)

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

Flash Point Method:PMCC
Flash Point:>200F,>93C
Extinguishing Media:USE CARBON DIOXIDE, DRY CHEMICAL, FOAM, WATER FOG.
Fire Fighting Procedures:USE NIOSH/MSHA APP

RVD SCBA & FULL PROT EQUIP .

COOL EXPOS CNTNRS W/WATER TO PVNT PRESS BUILDUP. IF LG QTYS OF MATL ARE INVOLVED, EVACUATE AREA & (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 RESPONSE OPERATIONS MUST BE CONDUCTED I/A/W PROVISIONS OF OSHA 29CFR 1910.120. REVIEW ENTIRE MSDS BEFORE

PROCEEDING W/SPILL RESPONSE. SM SPILLS:ACTIVATE AVAIL EXHST VENT EQUIP IN IMMED SPILL ARE A. WIPE UP/ABSORB SPILLED MATL WITH (ING 12)

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:STORE IN COOL, DRY LOCATION W/ADEQ VENT. KEEP CNTNR TIGHTLY SEALED WHEN NOT IN USE. KEEP AWAY FROM OPEN FLAMES & HEAT SOURCES. CONSULT PROD (ING 18)

Other Precautions:RECOMS FOR 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 DEVELOPED BY PERSON KNOWLEDGEABLE IN (ING 19)

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

Respiratory Protection:USE APPROP, PROPERLY FITTED, NIOSH/MSHA APPRVD RESPIRATOR IF EXPOSURES EXCEED PEL/TLV VALUES. THE TYPE OF PROT SELECTED (SCBA, AIR-PURIFYING, ETC) WILL DEPEND ON CONDI TIONS OF

USE. OBSERVE OSHA REGS F OR RESPIRATORY PROT (29 CFR 1910.134).

Ventilation:PROVIDE EFTIVE MECH EXHST VENT TO DRAW VAPS, MISTS OR FUMES GENERATED DURING PROCESSING AWAY FROM WORKER & (ING 22)

Protective Gloves:NEOPRENE GLOVES RECOM FOR (ING 24)

Eye Protection:ANSI APPRVD CHEM WORKERS GOGGLES .

Other Protective Equipment:ANSI APPROVED EYE WASH & DELUGE SHOWER .

WEAR PROPER CHEM-RESISTANT APRON & ADDNL IMPERVIOUS CLTHG TO (ING 25)

Work Hygienic Practices:NORM WORK CLTHG SH

OULD BE WASHED BEFORE REUSE.

WASH HANDS & FACE THORO AFTER HANDLG PROD & BEFORE
EATING/DRINKING/SMKNG.

Supplemental Safety and Health

SPEC GRAV: 1.02-1.14 (H*2O=1). FIRE FIGHT PROC:FIGHT FIRES FROM A SAFE
DIST. CNDTN TO AVOID:AGENTS OR EXPOS TO INCOMPAT SUBSTANCES. HAZ
DECOMP PRODS:COMBUST. CHEM NATURE & QTY OF DECOMP BY-PRODS WILL
VARY WIDELY DEPENDING ON CNDTNS OF COMBUST. EFTS OF
OVEREXP:INGEST:HARMFUL IF SWALLOWED. CHRONIC:STUDIES W/LAB (ING 4)

===== P
hysical/Chemical Properties =====

Spec Gravity:SUPDAT

Appearance and Odor:DARK BROWN LIQUID.

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

Stability Indicator/Materials to Avoid:YES

INCOMPATIBLE WITH STRONG OXIDIZERS, ACIDS, BASES, EPOXIES.

Stability Condition to Avoid:AVOID STOR IN OPEN CNTNRS, EXPOS TO OPEN

FLAME OR UNCONTROLLED EXPOS TO HEAT, UNCONTROLLED MIXING W/CURING
(SUPDAT)

Hazardous Decomposition Products:CARBON MONOXIDE, CARBON DIOXIDE,

ALDEHYDES, AMINES, ANILINE, ACIDS & OTHER ORG SUBSTANCES MAY BE
FORMED DURING (SUPDAT)

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

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH CURRENT 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.