

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:DAVID HAAS

CAGE:0VVR7

=== Contractor Identification ===

Company Name

e: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 #:UY5790000

Fraction by Wt: 20-30%

OSHA PEL:N/K

ACGIH TLV:N/K

Ing

red Name:VOLATILE ORGANIC COMPOUND: 540.5 G/L (EPA TEST METHOD 24)
RTECS #:99999999VO
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 #:99999999ZZ

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 #:99999999ZZ

Ingred Name:ING 5:BY MOTHER. EXPERIENCE TO DATE HAS NOT SHOWN
TERATOG
ENIC EFTS IN HUMANS. M-PHENYLENE DIAMINE MAY CAUSE LIVER(ING
7)
RTECS #:99999999ZZ

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 #:99999999ZZ

Ingred Name:ING 7:BEEN DETERMD TO CAUSE MUTAGENIC CHGS IN CULTURED
BACTERIAL & MAMMALIAN CELLS; HOWEVER IT HAS NOT SHOWN ANY (ING 9)
RTECS #:99999999ZZ

Ingred Name:ING 8: CARCINOGENIC ACTIVITY.
RTECS #:99999999ZZ

Ingred Name:FIRST AID PROC: DILUTE BY GIVI
NG PLENTY OF WATER TO DRINK
IF CONSCIOUS & ALERT. NEVER GIVE ANYTHING BY MOUTH TO (ING 11)
RTECS #:99999999ZZ

Ingred Name:ING 10: DROWSY, UNCONSCIOUS OR CONVULSING PERSON. GET IMMED
ATTN.
RTECS #:99999999ZZ

Ingred Name:SPILL PROC: VERMICULITE/OTHER SIMILAR MATL. WASH AREA
W/SOAPY WATER TO REMOVE RESIDUE. COLLECT ABSORBED MATL & (ING 13)
RTECS #:99999999ZZ

Ingred Name:ING 12: WATER RINSES IN APPROP CNTNRS. LG SPILLS:LIM ACCESS
TO IMMED SPILL AREA. SHUT OFF SOURCE OF RELS IF THIS(I

NG 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 WATERWAYS. 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 LIKELY.
RTECS #:9999999ZZ

Inged 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:CONTNS MATLS SEV IRRIT TO EYES.
SYMPS MAY INCL BLURRED VISION, BURNING SENSATION & TEARING.
SKIN:CONTNS 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 RSLT.
INHAL:HEATING CAN GENER ATE VAPS THAT MAY CAUSE RESP IR
RIT, 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 IR
RIT 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 APPRVD SCBA & FULL PROT EQUIP .
COOL EXPOS CNTNRS W/WATER TO PV

NT 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 CONDITIONS OF
USE. OBSERVE OSHA REGS F OR RESPIRATORY PROT (29 CF
R 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 SHOULD BE WASHED BEFORE REUSE.
WASH HANDS & FACE THORO AFTER H

ANDLG 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)

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

Spec Gravity:SU
PDAT
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.

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