

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:DA

VID 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 #:U

Y5790000

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 N

ame: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 ACTIVI
TY.

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

ACCESS

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

Ingr Name:ING 13: CAN BE DONE WITHOUT RISK OF INJURY. ACTIVATE AVAILABLE
EXHAUST VENT SYSTEM IN AREA. DIKE AREA TO CONTAIN SPILL & PREVENT (ING 15)
RTECS #:9999999ZZ

Ingr Name:ING 14: RELEASES TO SEWERS, DRAINS OR OTHER WATERWAYS.
COLLECT SPILLED MATERIAL FOR SALVAGE/DISPOSAL. APPLY ABSORBENT MATERIAL (ING 16)
RTECS #:9999999ZZ

Ingr Name:ING 15: TO SOAK UP RESIDUE. WASH AREA WITH SOAPY WATER. PREVENT
RUNOFF FROM ENTERING WATERWAYS. TRANSFER ABSORBED MATERIAL (ING 17)
RTECS #:9999999ZZ

Ingr Name:ING 16: & WATER RINSES TO APPROPRIATE WASTE CONTAINERS.
RTECS #:9999999ZZ

Ingr Name:HANDLING/STORAGE PRECAUTIONS: TECHNICAL BULLETIN FOR DETAILED STORAGE
INFORMATION.
RTECS #:9999999ZZ

Ingr Name:OTHER PRECAUTIONS: INTENDED USAGE CONDITIONS & EQUIPMENT. EMPLOYEES MUST
BE PROPERLY TRAINED IN SAFE HANDLING OF PRODUCT PRIOR TO (ING 20)
RTECS #:9999999ZZ

Ingr Name:ING 19: USE. PRODUCT CAN CAUSE SEVERE EYE IRRITATION, SKIN IRRITATION & MAY
CAUSE ALLERGIC SKIN REACTION.
SOME COMPONENTS OF PRODUCT MAY (ING 21)
RTECS #:9999999ZZ

Ingr Name:ING 20: ALSO BE ABSORBED THROUGH SKIN.
RTECS #:9999999ZZ

Ingr Name:VENTILATION: PREVENT ROUTINE INHALATION. THIS IS NECESSARY ESPECIALLY DURING ELEVATED
TEMPERATURE PROCESSING. VENTILATION MUST BE SUFFICIENT TO MAINTAIN (ING 23)
RTECS #:9999999ZZ

Ingr Name:ING 22: AIRBORNE LEVELS OF LISTED INGREDIENTS BELOW THEIR
PERMITTED EXPOSURE LIMIT/THRESHOLD LIMIT VALUES.
RTECS #:9999999ZZ

Ingr Name:PROTECTIVE GLOVES: ROUTINE WORK; BUTYL RUBBER GLOVES ARE RECOMMENDED
FOR WORK WHERE DIRECT CONTACT WITH LIQUID IS MORE LIKELY

LY.
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:CONTNS MATLS SEV IRRIT TO EYES.
SYMPS MAY INCL BLURRED VISION, BURNING SENSATION & TEARING.
SKIN:CONTNS MATLS WHICH CAUSE MOD IRRIT. Prolonged/repeated exposure to liquid may exert defat/drying action on skin, possibly resulting in dermal products may cause skin sensitization/allergic skin reactions which may be severe in certain persons; (Effects of overexposure)
Explanation of Carcinogenicity:NOT RELEVANT
Effects of Overexposure:Health hazard:Symptoms include rash, itch, hives, swelling of extremities. May be absorbed through skin. Product may cause temporary, orange-brown stain of skin; no adverse effects are known to result.
Inhalation:Heating can generate vapors that may cause respiratory irritation, nausea & headache. Inhalation hazard at room temperature is unlikely due to low volatility of product. (Supplemental data)
Medical Condition Aggravated by Exposure:EXPOSURE MAY AGGRAVATE PREEXISTING SKIN AND/OR EYE DISORDERS.

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

First Aid:EYE: FLUSH THOROUGHLY WITH WATER FOR AT LEAST 15 MIN WHILE HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION. SKIN: REMOVE ANY CONTAMINATED CLOTHING & FLUSH AREA THOROUGHLY WITH PLENTY OF WATER. FOLLOW BY WASHING WITH SOAP & WATER. GET MEDICAL ATTENTION IF IRRITATION PERSISTS. DO NOT REUSE CONTAMINATED CLOTHING UNTIL PROPERLY CLEANED. INHALATION:REMOVE TO FRESH AIR. PROVIDE OXYGEN IF BREATHING IS DIFFICULT. GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING. GET IMMEDIATE MEDICAL ATTENTION. INGESTION: (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 APPROVED

PRVD 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 COND ITIONS 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 S

HOULD 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)

=====

Physical/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.