

EMERSON AND CUMING -- CATALYST 11 -- 5970-00-081-4333

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

Product ID:CATALYST 11

MSDS Date:10/31/1998

FSC:5970

NIIN:00-081-4333

Kit Part:Y

MSDS Number: CKSWV

=== Responsible Party ===

Company Name:EMERSON AND CUMING

Address:46 MANNING ROAD

City:BILLERICA

State:MA

ZIP:01821

Country:US

Info Phone Num:978-436-9781

Emergency Phone Num:(800)424-9300

Resp. Party Other MSD

S Num.:600308

Preparer's Name:DAVID HAAS

Chemtec Ind/Phone:(800)424-9300

CAGE:UO004

=== Contractor Identification ===

Company Name:EMERSON AND CUMING

Address:46 MANNING ROAD

Box:City:BILLERICA

State:MA

ZIP:01821

Country:US

Phone:978-436-9781

CAGE:UO004

Company Name:GRACE W R & CO EMERSON & CUMING DEWEY & ALMY CHEM

Address:869 WASHINGTON ST

City:CANTON

State:MA

ZIP:02021-2513

Country:US

Phone:617-935-4850

CAGE:04552

Company Name:KAMPI COMPONENTS CO., INC.

Address:210 RT 13

Box:721

City:BRISTOL

S

tate:PA  
ZIP:19007-3517  
Country:US  
Phone:215-736-2000  
Contract Num:SP0430-00-M-H369  
CAGE:7Z016  
Company Name:MCKEOWN ROBERT CO. INC.  
Address:111 CHAMBERS BROOK RD.  
Box:City:SOMERVILLE  
State:NJ  
ZIP:08876  
Country:US  
Phone:908-218-9000  
Contract Num:SP0430-01-M-H935  
CAGE:7B953  
Company Name:MCKEOWN ROBERT CO. INC.  
Address:111 CHAMBERS BROOK RD.  
Box:City:SOMERVILLE  
State:NJ  
ZIP:08876  
Country:US  
Phone:908-218-9000  
Contract Num:SP0430-01-M-NC53  
CAGE:7B953  
Company Name:TRIMAN INDUSTRIES INC  
Address:420 COM  
MERCE LN SUITE 8  
Box:City:WEST BERLIN  
State:NJ  
ZIP:08091  
Country:US  
Phone:856-767-7945 /FAX: 856-767-7154  
Contract Num:SP0411-01-M-EK17  
CAGE:0ZBE8

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

Ingred Name:M-PHENYLENE DIAMINE  
Minumum % Wt:70.  
Maxumum % Wt:80.  
Other REC Limits:NOT PROVIDED  
ACGIH TLV:0.1 MG/M3

Ingred Name:N-METHYL PYRROLIDONE  
Minumum % Wt:20.  
Maxumum % Wt:30.  
Other REC Limits:NOT PROVIDED

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

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LD50 LC50 Mixture:NOT PROVIDED

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:EYES: SEVERELY IRRITATING TO EYES.

SKIN CONTACT: CAUSES MODERATE SKIN IRRITATION. PROLONGED OR REPEATED EXPOSURE TO LIQUID MAY EXERT DEFATTING OR DRYING ACTION ON SKIN, RESULTING IN DERMATITIS. THIS PRODUCT MAY CAUSE SKIN SENSITIZATION/ALLERGIC SKIN REACTIONS WHICH MAY BE SEVERE IN CERTAIN INDIVIDUALS

. MAY BE ABSORBED THROUGH SKIN. INHALATION: MAY

CAUSE RESPIRATORY IRRITATION. MAY CAUSE SENSITIZATION RESPONSES IN SUSCEPTIBLE INDIVIDUALS; REACTIONS MAY BE SEVERE IN SOME CASES.

SYMPTOMS MAY BE DELAYED. INGESTION: HARMFUL IF SWALLOWED.

Explanation of Carcinogenicity:M-PHENYLENE DIAMINE HAS NOT DEMONSTRATED ANY CARCINOGENIC ACTIVITY.

Effects of Overexposure:EYES: BLURRED VISION, BURNING SENSATION

, TEARING. SKIN: RASH, ITCHING, HIVES, SWELLING OF THE EXTREMITIES.

MAY BE A

BSORBED THROUGH SKIN. MAY CAUSE A TEMPORARY, ORANGE-BROWN STAINING OF THE SKIN; NO ADVERSE HEALTH EFFECTS ARE KNOWN TO BE RESULT FROM THIS STAINING. INHALATION: RESPIRATORY IRRITATION, NAUSEA , HEADACHES. INHALATION HAZARD AT ROOM TEMPERATURE IS UNLIKELY, DUE TO THE LOW VOLALITY OF TH IS PRODUCT. INGESTION: HARMFUL IF SWALLOWED.

Medical Cond Aggravated by Exposure:PERSONS WITH ASTHMA-TYPE

CONDITIONS, CHRONIC BRONCHITIS, OTHER CHRONIC RESPIRATORY DISEASES OR RECURRENT

SKIN ECZEMA OR SENSITIZATION SHOULD BE EXCLUDED FROM WORKING WITH PHENYLENE DIAMINES.

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

First Aid:EYE CONTACT: FLUSH EYES WITH WATER 15 MINUTES WHILE HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION. SKIN CONTACT: REMOVE AN CONTAMINATED CLOTHING AND FLUSH THE AFFECTED AREA OF THE SKIN THOROUGHLY WITH PLENTY OF WATER. FOLLOW BY WASHING WITH SOAP AND WATER. GET MEDICAL ATTENTION IF IRRITATION PERSISTS. DO NOT RE

USE

CONTAMINATED CLOTHING UNTIL PROPERLY CLEANED. INHALATION: REMOVE VICTIM TO FRESH AIR. PROVIDE OXYGEN IF BREATHING IS DIFFICULT.

GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING. GET IMMEDIATE MEDICAL ATTENTION. INGESTION: DILUTE BY GIVING PLENTY OF WATER TO DRINK, IF VICTIM IS CONSCIOUS AND ALERT. GET MEDICAL ATTENTION.

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

Flash Point Method:PMCC

Flash Point:>93.3C, 200.F

Lower Limits:N/E

Upper Limits:N/E

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xtinguishing Media:USE CARBON DIOXIDE, DRY CHEMICAL, FOAM, WATER FOG.  
Fire Fighting Procedures:FIREFIGHTER/RESCUE PERSONNEL SHOULD WEAR  
POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS AND FULL  
PROTECTIVE RQUIPMENT. COOL EXPOSED CONTAINERS WITH WATER TO PREVENT  
PRESSURE BUILDUP. IF LARGE QU ANTITIES OF MATERIAL ARE INVOLVED,  
EVACUATE AREA AND FIGHT FIRE FROM A SAFE DISTANCE.  
Unusual Fire/Explosion Hazard:DECOMPOSITION AND COMBUSTION PRODUCTS MAY  
BE TOXIC. CLOSED CONTAINER  
S MAY VIOLENTLY RUPTURE UNDER FIRE  
CONDITIONS.

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

Spill Release Procedures:STOP SOURCE OF SPILL. ACTIVATE EXHAUST  
VENTILATION IN AREA. DIKE AREA TO PREVENT RELEASES TO SEWERS,  
DRAINS, WATERWAYS. COLLECT SPILL FOR SALVAGE/DISPOSAL. APPLY  
ABSORBENT MATERIAL TO SOAK UP RESIDUE. WASH AREA WITH SOAPY  
WATER. PREVENT RUNOFF FROM ENTERING WATERWAYS. TRANSFER ABSORBED  
MATERIAL AND WATER RINSES TO CONTAINERS. DIS  
POSE OF IN ACCORDANCE  
WITH FEDERAL, STATE, AND LOCAL REGULATIONS.  
Neutralizing Agent:NOT PROVIDED

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

Handling and Storage Precautions:EMPLOYEES MUST BE PROPERLY TRAINED IN  
SAFE HANDLING OF THIS PRODUCT PRIOR TO USE. STORE IN COOL, DRY  
LOCATION WITH ADEQUATE VENTILATION. KEEP CONTAINER TIGHTLY SEALED  
WHEN NOT IN USE. KEEP AWAY FROM OPEN FLAMES AND HEAT SOURCES.  
CONSULT PRODUCT TECHNICAL BULLETIN FOR DETAILED  
STORAGE  
INFORMATION.

Other Precautions:BECAUSE USAGE CONDITIONS VARY DEPENDING ON CUSTOMER  
APPLICATION, SPECIFIC SAFE HANDLING PROCEDURES SHOULD BE DEVELOPED  
BY A PERSON KNOWLEDGEABLE IN THE INTENDED USAGE CONDITIONS, AND  
EQUIPMENT. EMPLOY EES MUST BE TRAINED IN SAFE HANDLING OF THIS  
PRODUCT PRIOR TO USE.

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

Respiratory Protection:USE AN APPROPRIATE, PROPERLY FITTED RESPIRATOR  
IF EXPOSURES EXCEED PEL/TLV VA

LUES. THE TYPE OF RESPIRATORY

PROTECTION SELECTED (SCBA, AIR-PURIFYING, ETC.) WILL DEPEND ON THE CONDITIONS OF USE. OBSERVE OSHA REGULATIONS FOR RESPIRATORY PROTECTION (29 CFR 1910.134).

Ventilation:PROVIDE EFFECTIVE MECHANICAL EXHAUST VENTILATION TO DRAW VAPORS, MISTS, OR FUMES AWAY FROM THE WORKER AND PREVENT ROUTINE INHALATION.

Protective Gloves:WEAR PROTECTIVE GLOVES.NEOPRENE GLOVES OVER RUBBER LATEX GLOVES RECOMMENDED.

Eye Protection:SPLASH-PROOF CHEMICAL GOGGLES, OR FACE SHIELD.

Other Protective Equipment:CHEMICAL-RESISTANT APRON AND ADDITIONAL IMPERVIOUS CLOTHING TO PREVENT SKIN CONTACT, CONTAMINATION OF CLOTHING AND POSSIBLE SKIN ABSORPTION. EMERGENCY EYE WASH AND SAFETY SHOWER MUST BE AVAILABLE.

Work Hygienic Practices:WASH HANDS AND FACE THOROUGHLY AFTER HANDLING THIS PRODUCT AND BEFORE EATING, DRINKING OR SMOKING. NORMAL WORK CLOTHING SHOULD BE WASHED BEFORE RE-USE.

Supplemental Safety and Health

THIS ENTRY DESCRIBES CATALYST 11 I

TEM OF A THREE PART KIT. SEE THIS

SAME NSN, MFN 1 FOR DATA COVERING STYCAST 2651-40 BLACK, MSDS SERIAL # CKVTW/CKSWD AND CATALYST 9, MSDS SERIAL # CKSWH, THE OTHER TWO ITEMS IN KIT.

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

HCC:B2

NRC/State Lic Num:NOT RELEVANT

Boiling Pt:B.P. Text:NOT DETERMINED

Melt/Freeze Pt:M.P/F.P Text:NOT PROVIDED

Decomp Temp:Decomp Text:NOT PROVIDED

Vapor Pres:70

Corrosion Rate:NOT PROVIDED

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

Stability Indicator/Materials to Avoid:YES

INCOMPATIBLE WITH STRONG OXIDIZERS, ACIDS, BASES. UNCONTROLLED MIXING WITH EPOXIDES MAY CAUSE NON-HAZARDOUS POLYMERIZATION OF THE EPOXY.

Stability Condition to Avoid:PRODUCT IS STABLE UNDER NORMAL HANDLING AND STORAGE CONDITIONS. AVOID STORAGE IN OPEN CONTAINERS, EXPOSURE TO OPEN FLAME, UNCONTROLLED EXPOSURE TO HEAT, INCOMPATIBLE SUBSTANCES.

Hazardous Decomposition Products:CARBON MONOXIDE, CARBON DIOXIDE

ALDEHYDES, AMINES, ANILINE, ACIDS AND OTHER ORGANIC SUBSTANCES MAY BE FORMED DURING COMBUSTION.

Conditions to Avoid Polymerization:HAZARDOUS POLYMERIZATION WILL NOT OCCUR. UNCONTROLLED MIXING WITH EPOXIDES MAY CAUSE NON-HAZARDOUS POLYMERIZATION OF EPOXY.

===== Toxicological Information =====

Toxicological Information:CHRONIC HEALTH EFFECTS:STUDIES WITH LAB TEST ANIMALS INDICATE N-METHYL PYRROLIDONE MAY BE EMBRYOTOXIC BY ORAL AND INTERPERIT ONEAL ROUTES. TERATOGENIC EFFECTS RESULTED ONLY AT MATERNALLY TOXIC DOSAGES . EFFECTS WERE NOT REPORTED AT DOSE LEVELS TOLERATED BY THE MOTHER. EXPERIENCE HAS NOT DEMONSTRATED TERATOGENIC EFFECTS IN HUMANS. M-PHENYLENE MAY CAUSE LIVER AND KIDNEY EFFECTS AS RESULT OF SHORT INH ALATION, INGESTION, OR SKIN EXPOSURES, BASED ON TESTS ON LAB ANIMALS. THIS COMPOUND HAS BEEN DETERMINED TO CAUSE MUTAGENIC CHANGES IN CULTURED BACTERIAL AND MAMMALIAN CELLS.

===== Ecological Information =====

Ecological:NOT PROVIDED

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

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH CURRENT FEDERAL, STATE, AND LOCAL REGULATIONS.

===== MSDS Transport Information =====

Transport Information:D.O.T. INFORMATION: PHENYLENE DIAMINES; 6.1; UN 1673; PG I I I. FREIGHT CODE: 2055.

===== Regulatory Information =====

SARA Title III Information:SARA STATUS: THE REPORTALE SUBSTANCES REFERENCED IN SECTION 2 WHICH ARE SUBSTANCES RGULATED BY THE SARA SECTION 313 AMENDMENTS TO RCRA ARE AS FOLLOWS M-PHENYLENE DIAMINE (108-45-2)

Federal Regulatory Information:TSCA STATUS: ALL COMPONENTS OF THIS PRODUCT ARE LISTED IN THE EPA TOXIC SUBSTANCE CONTROL ACT INVENTORY. THIS PRODUCT CONTAINS THE FOLLOWING SUBSTANCES WHICH ARE SUBJECT TO TSCA SECTION 12(B) EXPORT N OTIFICATION REQUIREMENTS: M-PHE

NYLENE DIAMINE (108-45-2).

State Regulatory Information:VOLATILE ORGANIC COMPOUND (V.O.C.) CONTENT  
AS TESTED IN ACCORDANCE WITH THE SOUTHERN CALIFORNIA AIR QUALITY  
MANAGEMENT DISTRICT RULE 109 (EPA TEST METHOD 24): 540.5 G/L.S

===== Other Information =====

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