

EMERSON AND CUMING -- CATALYST 9 (SEE SUPPL) -- 5970-00-081-4333

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

Product ID:CATALYST 9 (SEE SUPPL)

MSDS Date:05/22/2000

FSC:5970

NIIN:00-081-4333

Status Code:A

Kit Part:Y

MSDS Number: CLFHZ

=== 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 MSDS Num.:600008

Preparer's Name:DAVID HAAS

Chemtrec 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:MCKEOWN ROBERT CO. INC.

Address:111 CHAMBERS BROOK RD.

Box:City:SOMERVILLE

State:NJ

ZIP:08876

Country:US

Phone:908-218-9000

Contract Num:SP0430-00-M-H881

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:SP0430-99-M-TB01
CAGE:7B953

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

Ingred Name:TETRAETHYLENE PENTAMINE
Minumum % Wt:90.
Maxumum % Wt:100.
Other REC Limits:NOT PROVIDED

Ingred Name:TRIETHYLENE TETRAMINE
< Wt:5.
Other REC Limits:NOT PROVIDED

Ingred Name:PENTAETHYLENE HEXAMINE
< Wt:5.
Other REC Limits:NOT PROVIDED

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===== Hazar
ds Identification =====

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: CORROSIVE; MAY CAUSE BURNS,
CORNEAL INJURY, PERMANENT IMPAIRMENT OF VISION, BLINDNESS.. SKIN:
CORROSIVE; MAY CAUSE SEVERE BURNS, BLISTERING, SEVERE SKIN
SENSITIZATION/ALLERGIC SKIN REACTIONS. H ARMFUL IF ABSORBED THROUGH
SKIN. INHALATION: VAPORS MAY CAUSE IRRITA
TION, NAUSEA, HEADACHES.
MAY CAUSE RESPIRATORY SENSITIZATION RESPONSES IN SUSCEPTIBLE
INDIVIDUALS; REACTIONS MAY BE SEVERE IN SOME C ASES. SYMPTOMS MAY
BE DELAYED. INGESTION: HARMFUL IF SWALLOWED. MAY CAUSE BURNS TO
MOUTH, UPPER GI TRACT. CHRONIC: REPEATED OVEREXPOSURE TO
POLYETHYLENE POLYAMINES REPORTED TO CAUSE LIVER AND KIDNEY INJURY
IN TESTS ON LAB ANIMALS.
Explanation of Carcinogenicity:NONE
Effects of Overexposure:EYE CONTACT: BURNS, CORNEAL INJURY, BLINDNESS.

SKIN CONTACT: RASH, ITCHING, HIVES, SWELLING OF EXTREMITIES.

INHALATION: IRRITATION, NAUSEA, HEADACHE, RESPIRATORY SENSITIZATION RESPONSES. SYMPTOMS MAY INCLUDE TIGHTNESS OF CHEST, ASTHMA-LIKE SYMPTOMS, RESPIRATORY DISTRESS; SYMPTOMS MAY BE DELAYED. INGESTION: MAY CAUSE BURNS TO MOUTH AND UPPER GI TRACT.

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

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===== First Aid Measures =====
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First Aid: EYE: FLUSH WITH WATER FOR 15 MINUTES WHILE HOLDING EYELIDS OPEN. GET MEDICAL HELP. SKIN: FLUSH AREA WITH PLENTY OF WATER, WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. FOLLOW BY WASHING WITH SOAP AND WATER. AVOID SCRUBBING, THIS COULD INCREASE SKIN ABSORPTION AND WORSEN THE EFFECT. GET MEDICAL ATTENTION. INHALATION: MOVE TO FRESH AIR. PROVIDE OXYGEN IF BREATHING IS DIFFICULT. GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING. GET MEDICAL ATTENTION. INGESTION: DO NOT INDUCE VOMITING. GIVE WATER TO DRINK BUT NEVER GIVE ANYTHING BY MOUTH TO A DROWSY, UNCONSCIOUS, OR CONVULSING PERSON, GET MEDICAL ATTENTION IMMEDIATELY.

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===== Fire Fighting Measures =====
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Flash Point: >93.3C, 200.F

Lower Limits: N/E

Upper Limits: N/E

Extinguishing Media: USE CARBON DIOXIDE, DRY CHEMICAL, FOAM, WATER FOG.

Fire Fighting Procedures: FIREFIGHTERS/RESCUE PERSONNEL SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS AND FULL

PROTECTIVE EQUIPMENT. COOL EXPOSED CONTAINERS WITH WATER TO PREVENT PRESSURE BUILDUP. IF LARGE QUANTITIES 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 CONTAINERS MAY VIOLENTLY RUPTURE UNDER FIRE CONDITIONS.

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===== Accidental Release Measures =====
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Spill Release Procedures: ACTIVATE AVAILABLE EXHAUST VENTILATION

EQUIPMENT IN SPILL AREA. SHUT OFF SOURCE OF SPILL. DIKE TO PREVENT RELEASES TO SEWERS, DRAINS, WATERWAYS. COLLECT, WIPE UP/ABSORB SPILLED MATERIAL WITH VERMICULITE/ OTHER MATERIAL. WASH AREA WITH SOAPY WATER TO REMOVE RESIDUE. COLLECT ABSORBED MATERIAL AND WATER RINSES IN APPROPRIATE CONTAINER FOR DISPOSAL. PREVENT RUNOFF FROM ENTERING SEWER OR WATERWAYS

Neutralizing Agent:NOT PROVIDED

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

Handling and Storage

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

Other Precautions:BECAUSE USAGE CONDITIONS VARY DEPENDING ON APPLICATION, SPECIFIC SAFE HANDLING PROCEDURES SHOULD BE DEVELOPED BY A PERSON KNOWLEDGEABLE IN THE INTENDED USAGE CONDITIONS AND EQUIPMENT. DO NOT REUSE CONTAMINATED CLOTHING UNTIL PROPERLY CLEANED. CONTAMINATED LEATHER ARTICLES, INCLUDING SHOES, CANNOT BE DECONTAMINATED.

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

Respiratory Protection:WEAR AN APPROPRIATE, PROPERLY FITTED RESPIRATOR IF SYMPTOMS OF EXPOSURE APPEAR. THE TYPE OF RESPIRATORY PROTECTION SELECTED (SCBA, AIR-PURIFYING ETC.) WILL DEPEND ON THE CONDITIONS OF USE. OBSERVE OSH

A REGULATIONS FOR RESPIRATORY PROTECTION (29 CFR 1910.134). PROTECTIVE EQUIPMENT MAY NOT BE SUFFICIENT TO PROTECT PERSONS ALREADY SENSITIZED TO THIS MATERIAL.

Ventilation:PROVIDE EFFECTIVE MECHANICAL EXHAUST VENTILATION TO DRAW VAPORS, MISTS, FUMES GENERATED DURING PROCESSING AWAY FROM WORKERS AND PREVENT ROUTINE INHALATION.

Protective Gloves:PROTECTIVE NITRILE GLOVES,

Eye Protection:FACE SHIELD IN CONJUNCTION WITH SPLASH-PROOF CHEMICAL GOGGLES OR SAFETY GLASSES

Other Prote

Protective Equipment:CHEMICAL RESISTANT APRON AND ADDITIONAL IMPERVIOUS CLOTHING TO PREVENT SKIN CONTACT. EMERGENCY EYE WASH FACILITIES AND SAFETY SHOWER MUST BE AVAILABLE.

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

Supplemental Safety and Health

THIS IS A KIT. THE OTHER MSDS SERIAL NUMBERS: CLFHY, CLFJB

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

HCC:B2

NRC/State Lic Num:NOT RELEVANT

Boiling Pt:=317.8C, 604.F

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

Decomp Temp:Decomp Text:NOT PROVIDED

Vapor Pres:(MMHG@25C) AIR

Spec Gravity:(WATER=1) 0.99

pH:NOT PROVIDED

Viscosity:NOT PROVIDED

Evaporation Rate & Reference:NOT PROVIDED

Solubility in Water:SOLUBLE

Appearance and Odor:AMBER LIQUID, AMINE ODOR

Percent Volatiles by Volume:N/D

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 HAZARDOUS EXOTHERMIC POLYMERIZATION, POSSIBLY RESULTING IN EVOLUTION OF SMOKE AND TOXIC FUMES.

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

Hazardous Decomposition Products:CO, CO2, OX

IDES OF NITROGEN, AMMONIA,

AMINES AND OTHER ORGANIC SUBSTANCES MAY BE FORMED DURING COMBUSTION. THE CHEMICAL NATURE AND QUANTITY OF DECOMPOSITION BY-PRODUCTS WILL VARY.

Conditions to Avoid Polymerization:UNCONTROLLED MIXING WITH EPOXIDES.

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

Toxicological Information:NOT PROVIDED

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

Ecological:NOT PROVIDED

===== Disposal Considerations

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

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MSDS Transport Information =====

Transport Information:POLYAMINE, LIQUID, CORROSIVE, N.O.S.
(TETRAETHYLENE PENTAMINE, TRIETHYLENE TETRAMINE); 8; UN2735; PG
III.

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Regulatory Information =====

SARA Title III Information:SARA STATUS: THIS PRODUCT DOES NOT CONTAIN
ANY SUBSTANCES REGUL
ATED BY THE SARA SECTION 313 AMENDMENTS TO
RCRA.

Federal Regulatory Information:TSCA STATUS: ALL COMPONENTS OF THIS
PRODUCT ARE LISTED IN THE EPA TOXIC SUBSTANCE CONTROL ACT
INVENTORY.

State Regulatory Information:SPECIAL NOTES: 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): 441.5 G/L.

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Other Information =====

Discla
imer (provided with this information by the compiling agencies):
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