

EMERSON AND CUMING -- STYCAST 2651 BLACK (SEE SUPPL) -- 5970-00-081-4333

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

Product ID:STYCAST 2651 BLACK (SEE SUPPL)

MSDS Date:10/24/2000

FSC:5970

NIIN:00-081-4333

Status Code:A

Kit Part:Y

MSDS Number: CLFHY

=== 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

Eme

rgency Phone Num:800-424-9300

Resp. Party Other MSDS Num.:150255

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:MCKE

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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:DGEBA EPOXY RESIN
Minumum % Wt:40.
Maxumum % Wt:50.
Other REC Limits:NOT PROVIDED

Ingred Name:CRYSTALLINE SILICA
Minumum % Wt:20.
Maxumum % Wt:30.
Other REC Limits:NOT PROVIDED
OSHA PEL:0.1 MG/M3
ACGIH TLV:0.1 MG/M3

Ingred Name:MICA
CAS:12001-26-2
RTECS
#:VV8760000
Minumum % Wt:20.
Maxumum % Wt:30.
Other REC Limits:NOT PROVIDED
OSHA PEL:20 MPPCF
ACGIH TLV:3 MG/M3

Ingred Name:PHENYL GLYCIDYL ETHER
CAS:122-60-1
RTECS #:TZ3675000
Minumum % Wt:2.
Maxumum % Wt:5.
Other REC Limits:NOT PROVIDED
OSHA PEL:10 PPM
ACGIH TLV:0.1 PPM

Ingred Name:CARBON BLACK
CAS:1333-86-4
RTECS #:FF5800000
< Wt:1.
Other REC Limits:NOT PROVIDED
OSHA PEL:3.5 MG/M3
ACGIH TLV:3.5 MG/M3

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

LD50 LC50 Mixture

:NOT PROVIDED

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

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

Health Hazards Acute and Chronic:EYE CONTACT: CONTAINS MATERIALS IRRITATING TO THE EYES. SKIN: CONTAINS MATERIALS WHICH CAUSE MODERATE SKIN IRRITATION. PROLONGED OR REPEATED EXPOSURE TO THE LIQUID MAY EXERT A DEFATTING OR DRYING ACTION ON THE SKIN, POSSIBLY RESULTING IN DERMATITIS. PRODUCT MAY CAUSE SENSITIZATION/ALLERGIC SKIN REACTIONS WHICH MAY BE

SEVERE IN

CERTAIN INDIVIDUALS. INHALATION: HEATING CAN GENERATE VAPORS THAT MAY CAUSE RESPIRATORY IRRITATION, NAUSEA, AND HEADACHES.

INHALATION HAZARD AT ROOM TEMPERATURE IS UNLIKELY DUE TO THE LOW VOLATILITY OF THIS PRODUCT. INGESTION: HARMFUL IF SWALLOWED.

Explanation of Carcinogenicity:IARC CLASSIFIED FREE CRYSTALLINE SILICA A CLASS 2A CARCINOGEN, SUFFICIENT EVIDENCE IN ANIMALS, LIMITED IN HUMANS. IARC CLASSIFIED FREE CARBON BLACK A CLASS 2B CARCINOGEN, SUFFICIENT EV

IDENCE IN ANIMALS, NON EXISTENT IN HUMANS. IARC

CLASSIFIED PHENYL GLYCIDYL ETHER A CLASS 2B CARCINOGEN, SUFFICIENT EVIDENCE IN ANIMALS, NO HUMAN EVIDENCE.

Effects of Overexposure:EYE CONTACT: IRRITATION, BLURRED VISION, BURNING SENSATION, TEARING. SKIN CONTACT: IRRITATION, DEFATTING, DRYING, DERMATITIS, SKIN SENSITIZATION. ALLERGIC REACTION, RASH, ITCHING, HIVES, SWELLING OF THE EXTREMITIES. INHALATION: RESPIRATORY IRRITATION, NAUSEA, HEADACHES.

Medical Cond Aggravated

by Exposure:EXPOSURE MAY AGGRAVATE PREEXISTING SKIN AND/OR EYE DISORDERS.

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

First Aid:EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES, HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION. SKIN CONTACT: REMOVE CONTAMINATED CLOTHING. FLUSH AFFECTED SKIN AREA WITH WATER. FOLLOW BY WASHING WITH SOAP AND WATER. GET MEDICAL ATTENTION IF IRRITATION PERSISTS. LAUNDRY CONTAMINATED CLOTHING BEFORE REUSING. INHALATION: MOV

E VICTIM TO FRESH AIR. PROVIDE OXYGEN IF BREATHING DIFFICULT. GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING. GET MEDICAL ATTENTION. INGESTION: DILUTE BY GIVING PLENTY OF WATER TO DRINK, IF VICTIM IS CONSCIOUS AND ALERT. NEVER GIVE ANYTHING BY MOUTH TO DROWSY, UNCONSCIOUS, CONVULSING PERSON. GET MEDICAL ATTENTION.

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

Flash Point:>93.3C, 200.F

Lower Limits:N/E

Upper Limits:N/E

Extinguishing Media:USE CARBON DI

OXIDE, 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 Q UANTITIES 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. REACTION WITH CURING AGENTS IS EXOTHERMIC; SMOKE OR TOXIC FUMES MAY BE EVOLVED IF HEA T OF REACTION BECOMES EXCESSIVE DUE TO HIGH CURING TEMPERATURES OR CURING OF LARGE MASSES OF MATERIAL.

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

Spill Release Procedures:CONDUCT SPILL RESPONSE IN ACCORDANCE WITH OSHA 29 CFR 1910.120. VENTILATE AREA. STOP LEAK IF POSSIBLE. DIKE AREA TO CONTAIN SPILL AND PREVENT RELEASES TO SEWERS, DRAINS, OR

WATERWAYS. COLLECT SPILLED MATERIAL FOR SALVAGE OR DISPOSAL. SOAK UP RESIDUE WITH ABSORBENT. WASH AREA WITH SOAPY WATER. PREVENT RUNOFF FROM ENTERING WATERWAYS. TRANSFER ABSORBED MATERIAL AND WATER RINSES TO WASTE CONTAINERS.

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

Handling and Storage Precautions:STORE IN A COOL, DRY LOCATION WITH ADEQUATE VENTILATION. KEEP CONTAINER TIGHTLY SEALED WHEN NOT IN USE. KEEP AWAY FROM FLAMES AND HEAT SOURCES. CONSU

LT THE PRODUCT

TECHNICAL BULLETIN FOR DETAILED STOR AGE INFORMATION. EMPLOYEES MUST BE PROPERLY TRAINED IN SAFE HANDLING OF THIS PRODUCT PRIOR TO USE.

Other Precautions:NORMAL WORK CLOTHING SHOULD BE WASHED BEFORE REUSE. WASH HANDS AND FACE AFTER HANDLING AND BEFORE EATING, DRINKING, OR SMOKING. BECAUSE USAGE CONDITIONS WILL VARY, SPECIFIC SAFE HANDLING PROCEDURES SH OULD BE DEVELOPED BY A PERSON KNOWLEDGEABLE IN THE INTENDED USAGE CONDITIONS AND EQUIPMENT.

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

Respiratory Protection:USE AN APPROPRIATE, PROPERLY FITTED RESPIRATOR IF EXPOSURES EXCEED PEL/TLV VALUES. THE TYPE OF PROTECTION SELECTED (SCBA, AIR-PURIFYING, ETC) WILL DEPEND UPON THE CONDITIONS OF USE. OBSERVE OSHA REGULATIONS FOR RESPIRATORY PROTECTION (29 CFR 1910.134).

Ventilation:PROVIDE MECHANICAL EXHAUST VENTILATION SUFFICIENT TO PREVENT RESPIRATORY IRRITATION, AND MAINTAIN AIRBORNE LEVELS BELOW PEL/TLV VALUES.

Protective Gloves:APPROPRIATE PROTECTIVE GLOVES.

Eye Protection:CHEMICAL SAFETY GLASSES, SPLASH-PROOF CHEMICAL GOGGLES, FACE SHIELD AS NEEDED.

Other Protective Equipment:CHEMICAL RESISTANT APRON AND ADDITIONAL IMPERVIOUS CLOTHING SHOULD BE USED TO PREVENT SKIN CONTACT AND CONTAMINATION OF CLOTHING. EMERGENCY EYE WASH FACILITIES AND SAFETY SHOWER SHOULD 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: CLFHZ, CLFJB

==== 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:NEGLIGIBLE

Vapor Density:>AIR

Spec Gravity:1.65 (H2O=1)

Viscosity:NOT PROVIDED

Evaporation Rate &

amp; Reference:NOT PROVIDED

Solubility in Water:INSOLUBLE.

Appearance and Odor:BLACK LIQUID, PUNGENT ODOR

Percent Volatiles by Volume:2.5 BY WT

Corrosion Rate:NOT PROVIDED

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

Stability Indicator/Materials to Avoid:YES

INCOMPATIBLE WITH STRONG OXIDIZERS, ACIDS, BASES, UNCONTROLLED MIXING WITH AMINES, ANHYDRIDES, MERCAPTANS, IMIDAZOLES MAY CAUSE HAZARDOUS POLYMERIZATION.

Stability Condition to Avoid:PRODUCT IS STABLE UNDER

NORMAL HANDLING

AND STORAGE CONDITIONS.

Hazardous Decomposition Products: CARBON MONOXIDE, CARBON DIOXIDE, NITROGEN COMPOUNDS, PHENOLS, ALDEHYDES, ACIDS, OTHER ORGANIC SUBSTANCES MAY BE FORMED DURING COMBUSTION. CHEMICAL NATURE, AMOUNT OF DECOMPOSITION BY-PRODUCTS WILL VARY.

Conditions to Avoid Polymerization: WILL NOT OCCUR; HOWEVER REVIEW REACTIVITY DATA CONCERNING CONDITIONS TO AVOID AND INCOMPATIBLE SUBSTANCES.

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===== Toxicological Information =====
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Toxicological Information: CHRONIC HEALTH EFFECTS: ALTHOUGH THE SIGNIFICANCE IS UNKNOWN, THE DGEBA EPOXY RESIN IN THIS PRODUCT HAS BEEN SHOWN TO BE MUTAGENIC IN SOME MICROBIAL TESTS, BUT HAS FAILED TO SHOW MUTAGENICITY IN OTHERS. CHROMOSOMAL ABERRATIONS WERE OBSERVED IN CULTURED RAT LIVER CELLS. TWO-YEAR BIOASSAYS ON MICE EXPOSED BY THE DERMAL ROUTE TO DGEBA RESINS YIELDED ONLY VERY LIMITED EVIDENCE OF LIMITED CARCINOGENICITY. RECENT STUDIES INDICATE THAT BUTYL AND PHEYL GLYCIDYL ETHERS MAY INDUCE MUTAGENIC CHANGES IN LABORATORY ANIMALS. THIS HAS NOT BEEN RELATED TO HUMAN EXPOSURES.

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===== Ecological Information =====
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Ecological: NOT PROVIDED

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===== 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 =====
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Transport Information: D.O.T./IATA INFORMATION: NOT REGULATED.

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

Federal Regulatory Information: 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 NOTIFICATION.

ATION R EQUIREMENTS: DIGLYCIDYL ETHER
OF BISPHENOL A (1675-54-3).

State Regulatory Information:NOT PROVIDED

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

Disclaimer (provided with this information by the compiling agencies):
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particular situation.