

EMERSON & CUMING SPECIALTY POLYMERS DIV OF NATIONAL STARCH -- STYCAST 2651 BLACK  
(SEE SUPPL) -- 5970-00-787-8319

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

Product ID:STYCAST 2651 BLACK (SEE SUPPL)

MSDS Date:12/31/1998

FSC:5970

NIIN:00-787-8319

Kit Part:Y

MSDS Number: CLFCN

=== Responsible Party ===

Company Name:EMERSON & CUMING SPECIALTY POLYMERS DIV OF NATIONAL STARCH

Address:46 MANNING ROAD

City:BILLE

RICA

State:MA

ZIP:01821

Country:US

Info Phone Num:781-828-3300 OR 978-436-9781

Emergency Phone Num:800-424-9300

Resp. Party Other MSDS Num.:150255

Preparer's Name:DAVID HAAS

Chemtrec Ind/Phone:(800)424-9300

CAGE:TO215

=== Contractor Identification ===

Company Name:EMERSON & CUMING SPECIALTY POLYMERS DIV OF NATIONAL STARCH

Address:46 MANNING ROAD

Box:City:BILLERICA

State:MA

ZIP:01821

Country:US

Phone:781-828-3300 OR 978-436-9781

CAGE:TO215

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-H-659

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-NR42

CAGE:7B953

Company Name:MCKEOWN ROBERT CO. INC.

Address:111 CHAMBERS BROOK RD.

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State:NJ

ZIP:08876

OBERT 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-Y142  
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-Y157  
CAGE:7B953

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

Ingred Name:DGEBA EPOXY RESIN  
Minumum % Wt:40.  
Maxumum % Wt:50.

Ingred Name:CRYSTALLINE SILICA

Minumum % Wt:20.  
Maxumum % Wt:30.  
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.  
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.  
OSHA PEL:10 PPM  
ACGIH TLV:0.1 PPM

Ingred Name:CARBON BLACK  
CAS:1333-86-4  
RTECS #:FF5800000  
&lt; Wt:1.  
OSHA PEL:3.5 MG/M3  
ACGIH TLV:3.5 MG/M3

Ingred Name:DIGLYCIDYL BISPHENOL A ETHER  
CAS:1675-54-3  
RTECS #:T

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

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

Reports of Carcinogenicity:NTP:UNKNOWN IARC:YES

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 ACTI ON ON THE SKIN, POSSIBLY RESULTING IN DERMATITIS. PRODUCT MAY CA

USE

SENSITIZATION/ALLERGIC SKIN REACTIONS WHICH MAY BE SEVERE IN CERTAIN INDIVIDUALS. INHALTION: HEATING CAN GENERATE VAPORS THAT MAY CA USE RESPIRATORY IRRITATION, NAUSEA, AND HEADACHES. INHALATION HAZARD AT ROOM TEMPERATURE IS UNLIKELY DUE TO THE LOW VOTALITY OF THIS PRODUCT. INGESTION: HARMFUL IF SWALLOWED. CHRONIC: SEE TOXICOLOGICA L FIELD.

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 EVIDENCE IN ANIMA LS, 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, DERMITITIS, SKIN SENSITIZATION. ALLERGIC REACTION, RASH, ITCHING, HIVES, SWELLING OF T

HE 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 ATTEN

TION IF

IRRITATION PERSISTS. LAUNDRER CONTAMINATED CLOTHING BEFORE REUSING.  
INHALATION: MOVE VICTIM TO FRESH AIR. PROVIDE OXYGEN IF BREATHING  
DIFFICULT. GIVE ARTIFICIAL RES PIRATION 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, CONVULSIN G PERSON. GET MEDICAL  
ATTENTION.

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

Lower Limits:NOT ESTABLIS

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 Q UANTITIES OF MATERIAL ARE INVOLVED,  
EVACUATE AREA AND FIGHT FIRE FROM A SAFE DISTANCE.

Unusual Fire/Explosion Ha

zard: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.

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===== Accidental Release Measures =====  
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Spill Release Procedures:CONDUCT SPILL RESPONSE IN ACCORDANCE WITH OSHA  
29 CFR 1910.120. VENTILAT

E 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.

Neutralizing Agent:NOT PROVIDED

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===== Handling and Storage =====  
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Handling and Storage Precautions:STORE IN A COOL, D

RY LOCATION WITH

ADEQUATE VENTILATION. KEEP CONTAINER TIGHTLY SEALED WHEN NOT IN USE. KEEP AWAY FROM FLAMES AND HEAT SOURCES. CONSULT THE PRODUCT TECHNICAL BULLETIN FOR DETAILED STORAGE 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 SHOULD BE DEVELOPED BY A PERSON KNOWLEDGEABLE IN THE INTENDED USAGE CONDITIONS AND EQUIPMENT.

===== 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).

Ventilat

ion: 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

Y

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 ENTRY DESCRIBES PART 3, STYCAST 2651 BLACK, OF A THREE PART KIT. SEE THIS SAME NSN, CATALYST 9, FOR KIT PART ONE DATA AND THIS SAME NSN, CATALYST 11, FOR KIT PART TWO DATA. \*\*CONTD FROM PRODUCT ID: THIS IS MCKEOWN KIT CONTAINING STYC

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

HCC:B2  
Boiling Pt:B.P. Text:ND  
Melt/Freeze Pt:M.P/F.P Text:NP  
Vapor Pres:NEGLIGIBLE  
Vapor Density:>AIR  
Spec Gravity:1.65 (H2O=1)  
Solubility in Water:INSOLUBLE.  
Appearance and Odor:BLACK LIQUID, PUNGENT ODOR  
Percent Volatiles by Volume:2.5

===== 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.

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

Toxicological Information:DGEBA EPOXY RESIN SHOWN TO BE MUTAGENIC IN  
SOME MICROBIAL TESTS BUT NOT IN OTHERS. CHROMOSOMAL ABBERATIONS  
OBSERVED IN CULTURED RAT LIVER CELLS. 2 YR BIOASSAYS ON MICE  
EXPOSED DERMALLY GAVE WEAK VERY LIMITED EVIDENCE OF WEAK  
CARCINOGENICITY. DGEBA EPOXY NOT CARCINOGEN BY IARC.  
PROLONGED  
EXPOSURE TO FREE SILICA MAY SCAR LUNGS, WITH COUGH, SHORTNESS OF  
BREATH. EXPOSURE TO FILLER MATERIAL UNLIKELY UN LESS PRODUCT IS  
APPLIED IN MANNER WHICH RESULTS IN GENERALTION OF MISTS/FUMES.  
PHENYL GLYCIDAL ETHER REPORTED TO CAUSE NASAL CANCERS IN LIFETIME  
INHALATION STUDIES ON RATS AT CONCENTRATIONS OF 12 PPM. NO EFFECTS  
OBSERVED AT 1 PPM.

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

Ecological:NOT PROVIDED

===== Dis

posal Considerations =====

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

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

Transport Information:RESIN COMPOUND N.O.I. - NON REGULATED. FREIGHT  
CODE: 2015

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

Federal Regulatory Information:ALL COMPONENTS LISTED IN EPA TSCA  
INVENTORY. PRODUCT CONTAINS DIGLYCIDYL ETHER OF BISPHENOL

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(1675-54-3) SUBJECT TO TSCA EXPORT NOTIFICATION REQUIREMENTS.

State Regulatory Information:NOT PROVIDED

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