

EMERSON AND CUMING -- STYCAST 2850FT BLACK -- 5970-01-061-7555

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

Product ID:STYCAST 2850FT BLACK

MSDS Date:12/31/1998

FSC:5970

NIIN:01-061-7555

Status Code:A

Kit Part:Y

MSDS Number: CLRGF

=== 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:(80

0) 424-9300

Resp. Party Other MSDS Num.:S50005

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:KEARFOTT GUIDANCE AND NAVIGATION CORPORATION

Address:150 TOTOWA ROAD CN 595

City:WAYNE

State:NJ

ZIP:07474-0595

Country:US

Phone:201-785-6000

Contract Num:SP0413-01-M0622

CAGE:88818

===== Com

position/Information on Ingredients =====

Ingred Name:CARBON BLACK
CAS:1333-86-4
RTECS #:FF5800000
< Wt:.3
OSHA PEL:3.5 MG/M3
ACGIH TLV:3.5 MG/M3

Ingred Name:N-BUTYL GLYCIDYL ETHER
CAS:2426-08-6
RTECS #:TX4200000
Minumum % Wt:1.
Maxumum % Wt:2.
OSHA PEL:50 PPM
ACGIH TLV:25 PPM

Ingred Name:MODIFIERS
< Wt:2.
OSHA PEL:NA

Ingred Name:ALUMINUM OXIDE
CAS:1344-28-1
RTECS #:BD1200000
Minumum % Wt:70.
Maxumum % Wt:80.
OSHA PEL:15 MG/M3
ACGIH TLV:10 MG/M3

Ingred Name:DGEBA EPOXY RESIN
Minumum % Wt:20.
Maxumum % Wt:30.
OSHA PEL:NE
ACGIH TLV:NE

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

Reports of Carcinogenicity:NTP:UNKNOWN IARC:YES
Health Hazards Acute and Chronic:EYE CONTACT: IRRITATION. SKIN CONTACT:
CAUSES MODERATE IRRITATION. PROLONGED OR REPEATED EXPOSURE TO THE
LIQUID MAY EXERT A DEFATTING OR DRYING ACTION, POSSIBLY RESULTING
IN DERMATITIS. MAY CAUSE SKIN SENSITIZATION/ALLERGIC SKIN
REACTIONS WHICH MAY BE SEVERE IN CERTAIN

INDIVIDUALS. INHALATION:

VAPORS MAY CAUSE RESPIRATORY IRRITATION. HAZARD AT ROOM TEMPERATURE IS UNLIKELY. INGESTION: HARMFUL IF SWALLOWED.

Explanation of Carcinogenicity:IARC CLASSIFIED FREE CARBON BLACK AS CLASS 2B CARCINOGEN, SINCE THERE IS SUFFICIENT EVIDENCE FOR CARCINOGENICITY IN ANIMALS (BASED ON INHALATION STUDIES), BUT EVIDENCE FOR CARCINOGENICITY IN HUMANS IS NONEXISTENT. EXPOSURE TO FREE CARBON BLACK, HOWEVER, IS UNLIKELY, UNLESS CURED PRODUCT IS MACHIN

ED OR GROUND GENERATING AIRBORNE DUST AND INHALATION EXPOSURE.

Effects of Overexposure:EYE CONTACT: SYMPTOMS MAY INCLUDE IRRITATION, BLURRED VISION, BURNING SENSATION AND TEARING. SKIN CONTACT: SYMPTOMS INCLUDE IRRITATION, DEFATTING, DERMATITIS, RASH, ITCHING, HIVES, SWELLING OF THE EXT REMITIES, SKIN SENSURUZATUIB/ALLERGIC SKIN REACTIONS. INHALATION: RESPIRATORY IRRITATION,NAUSEA, AND HEADACHES.

Medical Cond Aggravated by Exposure:EXPOSURE MAY AGGRAVATE PREEXISTING S KIN AND/OR EYE DISORDERS.

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

First Aid:EYE CONTACT: FLUSH WITH WATER FOR 15 MINS, HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION. SKIN CONTACT: REMOVE CONTAMINATED CLOTHING. FLUSH EXPOSED SKIN AREAS WITH WATER. FOLLOW BY WASHING WITH SOAP AND WATER. GET MEDICAL ATTENTION IF IRRITATION PERSISTS. INHALATION: MOVE TO FRESH AIR. PROVIDE OXYGEN IF BREATHING IS 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 A DROWSY, UNCONSCIOUS, CONVULSING PERSON. GET MEDICAL ATTENTION.

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

Flash Point:>93.3C, 200.F

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

Fire Fighting Procedures:FIREFIGHTERS/RESCUE PERSONNEL SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BR

EATHING 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:SPILL RESPONSE OPERATION MUST BE CONDUCTED IN ACCORDANCE WITH PROVISIONS OF OSHA 29 CFR 1910.120. SMALL SPILL: VENTILATE SPILL AREA. WIPE UP OR ABSORB SPILLED MATERIAL WITH VERMICULITE OR OTHER SIMILA R MATERIAL. WASH AREA WITH SOAPY WATER TO REMOVE RESIDUE. COLLECT ABSORBED MATERIAL AND WATER RINSES IN APP

ROPRIATE CONTAINER FOR DISPOSAL. LARGE SPILLS: STOP SPILL. VENTILATE (CONTD.SEE "OTHER INFO")

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

Handling and Storage Precautions:BECAUSE USAGE CONDITIONS WILL VARY DEPENDING ON CUSTOMER APPLICATION, SPECIFIC SAFE HANDLING PROCEDURES SHOULD BE DEVELOPED BY A PERSON KNOWLEDGABLE IN THE INTENDED USAGE CONDITIONS AND EQUIPMENT. EMP LOYEES MUST BE PROPERLY TRAINED IN SAFE HANDLING OF THIS PRODUCT PRIOR TO USE.

Oth
er Precautions:STORAGE: 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.

===== 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 EFFECTIVE MECHANICAL EXHAUST VENTILATION SUFFICIENT TO MAINTAIN AIRBORNE LEVELS BELOW THEIR PEL/TLV VALUES.

Protective Gloves: WEAR APPROPRIATE PROTECTIVE GLOVES.

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

Other Protective Equipment: WEAR A PROPER CHEMICAL-RESISTANT APRON AND ADDITIONAL IMPERVIOUS CLOTH

ING TO PREVENT SKIN CONTACT AND

CONTAMINATION OF CLOTHING. EMERGENCY EYE WASH FACILITIES AND SAFETY SHOWER SHOULD BE AVAILABLE.

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

Supplemental Safety and Health

THIS ENTRY DESCRIBES ONE PART OF A TWO PART KIT, SERIAL # "CLRGF"

STYCAST 2850FT BLACK. SEE THIS SAME NSN SERIAL # "CLRFS",

CATALYST-11, FOR D

DESCRIPTION OF SECOND PART OF KIT.

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

HCC:T4

Boiling Pt: B.P. Text: N/D

Vapor Pres: AIR

Spec Gravity: 2.35 - 2.45 (WATER=1)

Solubility in Water: INSOLUBLE

Appearance and Odor: BLACK LIQUID, MILD ODOR.

Percent Volatiles by Volume: