

Emerson & Cuming

a National Starch & Chemical Company

MATERIAL SAFETY DATA SHEET

EMERSON & CUMING
46 MANNING ROAD
BILLERICA, MASSACHUSETTS 01821

IN THE EVENT OF A CHEMICAL EMERGENCY
INVOLVING A SPILL, LEAK, FIRE, EXPOSURE, OR
ACCIDENT, NOTIFY:
CHEMTREC USA: 800-424-9300
INTERNATIONAL: 202-483-7616 (COLLECT)

SECTION 1: IDENTIFICATION

Product Name: ECCOCOAT[®] UV-7993
General Chemical Description: UV-Curable Compound

SECTION 2: INGREDIENTS

<u>Hazardous Components</u>	<u>% by Weight</u>	<u>Exposure Guidelines</u>	
		<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Acrylate Esters	30-60%	NE	NE
Acrylate-terminated Polyisocyanate	30-60%	NE	NE
Methacrylate Ester	10-30%	NE	NE
Methoxysilane	1-5%	NE	NE

Non-Hazardous Components **% by Weight**
Photoinitiators, Modifiers

SECTION 3: PHYSICAL DATA

Boiling Point (°F): ND
Vapor Pressure (mm Hg @ 20°C): < 0.1
Percent Volatiles by Weight: < 0.25% at ambient temperature curing
Specific Gravity (water = 1): 1.03
Solubility in Water: Negligible
Vapor Density: >1
Appearance and Odor: Translucent, yellow tint liquid, sweet odor
Evaporation rate: <Butyl Acetate

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point (°F):
> 200, based on flash points of components

Flammable Limits
Not Established

Extinguishing Media:
Use carbon dioxide, dry chemical, foam, water fog.

Unusual Fire or Explosion Hazard:

Decomposition and combustion products may be toxic. Closed containers may violently rupture under fire conditions.

Special Firefighting 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.

SECTION 5: REACTIVITY DATA

Product Stability:

Product is stable under normal handling and storage conditions. Hazardous polymerization will not occur; however, review reactivity data concerning conditions to avoid and incompatible substances.

Incompatibility:

Incompatible with water, strong oxidizers, amines, alcohols, bases. Uncontrolled mixing with peroxides, copper, iron, other free radical polymerization initiators may cause non-hazardous polymerization. Methoxysilane and water may liberate Methanol.

Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide, isocyanates, acrylates, aldehydes, acids, traces of cyanides, and other organic substances may be formed during combustion. The chemical nature and quantity of decomposition by-products will vary widely depending on the conditions of combustion.

Conditions to Avoid:

Avoid storage in open containers, exposure to open flame or uncontrolled exposure to heat, exposure to incompatible substances, exposure to UV light or sunlight.

SECTION 6: RELEASE RESPONSE DATA

Small Spills:

Activate available exhaust ventilation equipment in the immediate spill area. Wipe up or absorb spilled material with vermiculite or other similar material. Wash area with soapy water to remove residue. Collect absorbed material and water rinses in appropriate containers. Dispose of in accordance with current Federal, State, and local regulations.

Large Spills:

Limit access to the immediate spill area. Shut off source of the release if this can be done without risk of injury. Activate available exhaust ventilation systems in the area. Dike area to contain the spill and prevent releases to sewers, drains or other waterways. Collect spilled material 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 appropriate waste containers. Dispose of in accordance with current Federal, State and local regulations.

SECTION 7: HANDLING PRECAUTIONS

Printed: 10/23/01

Page: 2

The information given and the recommendations made herein apply to our product(s) alone and are not combined with other product(s). Such are based on our research and on data from other reliable sources and are believed to be accurate. No guaranty of accuracy is made. It is the purchaser's responsibility before using any product to verify this data under their own operating conditions and to determine whether the product is suitable for their purposes.

Personal Protection:

This product can cause eye irritation. Prevent eye contact through the use of chemical safety glasses, splash-proof chemical goggles, or face shield selected with regard to conditions of usage and exposure potential. This product can cause skin irritation and may cause allergic skin reactions. Components of this product may also be absorbed through the skin. Wear appropriate protective gloves, a proper chemical-resistant apron and additional impervious clothing to prevent skin contact, contamination of clothing and possible skin absorption. Normal work clothing should be washed before re-use. Wash hands and face thoroughly after handling this product and before eating, drinking or smoking. Emergency eye wash facilities and safety shower should be available.

Glove recommendations: Based on testing of this product, the following gloves offer the best permeation/degradation resistance. Actual glove selection must, however, be based on the user's in-house processes and other conditions of use for this product:

Neoprene 6780

Nitri-Solve 727

PVC Hustler 725R

Viton 890

All are available from Best Glove Manufacturing Co., Menlo, GA (706)862-2302

Ventilation Recommendations and Respiratory Protection:

Provide effective mechanical exhaust ventilation to draw vapors, mists or fumes generated during processing away from the worker and prevent routine inhalation. This is necessary especially during elevated temperature processing.

Storage:

Store in a cool, dry location in original containers. Keep container tightly sealed when not in use. Keep away from open flames and heat sources. Avoid prolonged exposure to sunlight or other UV light sources. Consult the product Technical Bulletin for detailed storage information.

SECTION 8: HEALTH DATA

Routes of Exposure:

Skin and eye contact, inhalation.

Medical Conditions Aggravated by Exposure:

Pre-existing skin or eye conditions, including skin allergies, asthma, bronchitis, emphysema and any other respiratory disorders.

Eye Contact:

Contains materials irritating to the eyes. Symptoms may include blurred vision, burning sensation and tearing.

Skin Contact:

Contains materials which cause moderate skin irritation. Prolonged contact may result in dermatitis. This product may cause skin sensitization/allergic skin reactions which may be severe in certain individuals. Symptoms may include rash, itching, hives, reddening, or swelling of the extremities. Acrylate and methacrylate monomers may be absorbed through the skin; however, there is no specific dermal toxicity data for this product as a whole.

Inhalation:

Overexposure to vapors may cause respiratory irritation, nausea and headaches. Inhalation hazards at room temperature is unlikely, due to the low volatility of this product.

Ingestion:

Harmful if swallowed.

Chronic Health Effects:

None known.

SECTION 9: FIRST AID PROCEDURES

Eye Contact:

Flush eyes thoroughly with water at least 15 minutes while holding eyelids open. Get medical attention.

Skin Contact:

Remove any 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 reuse contaminated clothing until properly cleaned. Contaminated leather articles, including shoes, cannot be decontaminated and should be destroyed.

Inhalation:

Remove victim to fresh air. Provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get immediate 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, or convulsing person. Get immediate medical attention.

SECTION 10: ADDITIONAL INFORMATION

Product NPCA Hazardous Material Identification System (HMIS) Rating:

Health: 2 Flammability: 1 Reactivity: 1

TSCA Status:

All components of this product are listed in the EPA Toxic Substance Control Act Inventory.

Foreign Inventory Status:

Canadian DSL: All components listed or exempt
European EINECS: All components listed or exempt
Japanese MITI ENCS: Not all components listed
Korean ECL: Not determined
Australian AICS: Not determined

SARA Status:

This product does not contain any substances regulated by the SARA Section 313 amendments to RCRA.

D.O.T. /IATA Information:

Resin Compound, N.O.I. - Non-Regulated

Special Notes: California Proposition 65 Information:

ECCOCOAT® UV-7993

WARNING: This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm :

Toluene (108-88-3) - < 0.002%

Date Prepared: 12/31/00 **Supersedes:** 11/8/00
Document No.: 134984 **Prepared by:** David Haas
Revision Information: Section 2 Component listing
Website Identifier: UV-7993 - 134984

Abbreviations:
NA = Not Applicable
NE = Not Established
ND = Not Determined
ppm = Parts per Million
mg/m3 = Milligrams per Cubic Meter
C = Ceiling Concentration
mppcf = Million Parts per Cubic Foot
STEL = Short Term Exposure Limit
f/cc = Fibers per Cubic Centimeter

SAFETY INFORMATION: (978)436-9781

ADDITIONAL MSDS: (781)828-3300