

FILM SPECIALTIES, INC.  
 4 Jill Court, PO Box 6000, Hillsborough, NJ 08844  
 MATERIAL SAFETY DATA SHEET  
 CHEMTREC# (800) 424-9300 NATIONAL RESPONSE CENTER# (800) 424-8802

PRODUCT: VISGARD™ FORMABLE SCRATCH-RESISTANT ANTI FOG  
 106-94 CONCENTRATE, PART A  
 EFFECTIVE: SEPTEMBER 11, 1998  
 ISSUED: SEPTEMBER 11, 1998  
 COMPANY: FILM SPECIALTIES, INC.  
 TRADE NAME: VISGARD DUAL COATING  
 ISSUED: AUGUST 26, 1996  
 SUPERSEDES: VISGARD™ DUAL COATING 106-80 PART A

1. HAZARDOUS INGREDIENT	<u>C.A.S. NO.</u>	<u>PERCENT</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
N-methyl Pyrrolidone	872-50-4	10	100 ppm	----
2,4-pentanedione	123-54-6	15	20 ppm	----

2. PHYSICAL DATA

- a. BOILING POINT 120°-200° C
- b. VAPOR PRESSURE @ 70° F 5mm
- c. VAPOR DENSITY >1
- d. EVAPORATION RATE >1
- e. SOLUBILITY IN WATER >90%
- f. SPECIFIC GRAVITY 0.93
- g. PERCENT VOLATILE 31
- h. PH NA
- i. VISCOSITY 150 cps
- j. MELTING POINT N.A.
- k. APPEARANCE AND ODOR Clear light yellow liquid

3. FIRE AND EXPLOSION DATA

- a. FLASH POINT 115° F TCC
- b. FLAMMABLE LIMITS - LEL 1.7
- c. FLAMMABLE LIMITS - UEL 11.4
- d. AUTOIGNITION TEMPERATURE Unknown
- e. EXTINGUISHING MEDIA: Dry chemical, foam, CO<sub>2</sub>, or water spray.
- f. SPECIAL FIRE FIGHTING PROCEDURES: Do not enter fire space without protective equipment. Cool fire exposed container with water.
- g. UNUSUAL FIRE AND EXPLOSION HAZARDS: Handle as a combustible liquid fire.

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4. REACTIVITY DATA

- a. STABILITY: Stable
- b. INCOMPATIBILITY - MATERIALS TO AVOID: Avoid contact with oxidizing and reducing agents, strong acids & bases, halogens.
- c. HAZARDOUS POLYMERIZATION: Will not occur
- d. HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioxide and carbon monoxide.

5. ENVIRONMENTAL INFORMATION

- a. SPILL RESPONSE: Eliminate sources of ignition. Wear NIOSH approved respirators & evacuate other personnel. Do not allow product to enter sewers, lakes, rivers, streams, or public water supply. Notify local authorities if this happens or is threatened. Small spills can be picked up by absorbent media & placed in sealed containers for disposal.
- b. RECOMMENDED DISPOSAL: Dispose in accordance with Federal, state and local regulations. This is an ignitable, hazardous waste under EPA-RCRA 40 CFR 201.21. Waste code 0001.
- c. REGULATORY INFORMATION: This product is listed on the EPA/ISCA Inventory of chemical substances.

6. SUGGESTED FIRST AID

- a. EYE CONTACT: Flush eyes with water for at least 15 minutes & contact a physician.
- b. SKIN CONTACT: Wash skin with soap & water.
- c. INHALATION: Remove contaminated clothing & take victim to fresh air.
- d. IF SWALLOWED: Give large amounts of water, induce vomiting & contact a physician.

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7. PRECAUTIONARY INFORMATION

- a. EYE PROTECTION: Wear splash goggles
- b. SKIN PROTECTION: Wear impermeable gloves such as neoprene, or other suitable for organic liquids. Wash thoroughly after handling.
- c. VENTILATION PROTECTION: Provide adequate ventilation during use. Is necessary to maintain PEL. Equipment must be explosion proof.
- d. RESPIRATORY PROTECTION: Atmosphere supplying or air purifying for organic vapors in accordance with 29 CFR 1910.134. Wear NIOSH approved respirators & evacuate other personnel.
- e. RECOMMENDED STORAGE: Keep liquid & vapor away from heat, sparks & flame. Ground containers. Wear splash goggles, impermeable gloves & provide adequate ventilation during use.
- f. FIRE AND EXPLOSION AVOIDANCE: Eliminate sources of ignition. Avoid heat, and strong oxidizing agents.
- g. OTHER PRECAUTIONARY INFORMATION: Launder contaminated clothing before re-use. Avoid prolonged breathing of vapors or repeated contact with skin. DOT classification - combustible liquid. Proper shipping name - Combustible liquid N.O.S. Other requirements - NA 1993, guide sheet 26.
- h. SOURCE OF EXPOSURE LIMIT DATA: NA

8. HEALTH HAZARD DATA

- a. EYE CONTACT: Liquid is irritating to eyes.
- b. SKIN CONTACT: Liquid is irritating to skin. Prolonged skin contact can cause dryness and irritation.
- c. INHALATION: Can cause headache, dizziness, nausea, and eventually unconsciousness.
- d. IF SWALLOWED: Contact physician and local poison control center.
- e. CANCER: No
- f. MUTAGENICITY: Possible
- g. OTHER HEALTH HAZARD INFORMATION: Overexposure may damage kidneys, liver, thymus and nervous system. Pre-existing eye, skin & respiratory disorders may be aggravated by exposure.

This product is toxic by ingestion, inhalation or skin contact, and may present reproductive and neurological hazards. Oral LD50 (rat) = 55 mg/kg; skin LD50 (rabbit) = 810ul/kg.