

MATERIAL SAFETY DATA SHEET

Revision Date: June 4, 2010

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SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Manufacturer: ACTEGA Kelstar, Inc.
1050 Taylors Lane
Cinnaminson, NJ 08077
(856) 829-6300

Emergency Phone: Chemtrec Phone: (800) 424-9300

Product Name: ULTRA SHEEN UV-9790

Generic Name: U.V. Matte Coating

SECTION 2 - COMPOSITION (Hazardous Ingredients)

The components listed below are identified as hazardous chemicals based upon the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Chemical Name	CAS #	Weight %
Trimethylol Propane Ethoxy Triacrylate	28961-43-5	15 - 40
Proprietary Material	Trade Secret	10 - 30
Hexamethylene Diacrylate	13048-33-4	10 - 30
Hydrated Amorphous Silica	7631-86-9	5 - 15
Dipropylene Glycol Diacrylate	57472-68-1	5 - 15
Amine Acrylate	Trade Secret	5 - 15
Benzophenone	119-61-9	3 - 7

SECTION 3 - HAZARDS IDENTIFICATION

*** EMERGENCY OVERVIEW ***

Form: Liquid
Color: Milky White
Odor: Acrylate

***** WARNING STATEMENTS *******WARNING!**

Material may be irritating to skin and eyes.

Material may cause allergic skin reaction.

Material may be harmful if absorbed through the skin.

***** POTENTIAL HEALTH EFFECTS *****

Skin contact is expected to be the primary route of occupational exposure. The following statements are based on an assessment of the health effects associated with the ingredients present in this product.

Eye Contact:	Contact with eyes may cause moderate to severe eye irritation. Symptoms may include stinging, tearing, redness, swelling and/or burning.
Skin Contact:	Contact with skin may cause moderate to severe irritation. Initial contact may go unnoticed, irritant effects may be delayed. Symptoms may include redness, itching, drying and cracking of the skin. Allergies, eczema or skin conditions may be aggravated by exposure.
Inhalation:	Inhalation is an unlikely route of exposure under conditions of intended use. Higher temperatures may generate vapors that may cause irritation of the eyes and respiratory tract.
Ingestion:	Ingestion is an unlikely route of exposure under conditions of intended use. Deliberate ingestion of excessive quantities may be harmful.
Chronic Health Hazard:	No chronic health hazards are associated with the components present in this product. This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater.

SECTION 4 – FIRST AID MEASURES

Eye Contact:	Wash with large amounts of water for at least 15 minutes, lifting upper and lower lids occasionally. Seek immediate medical attention if irritation or redness persists.
Skin Contact:	Remove contaminated clothing and wash with soap and water. Solvents should not be used to clean skin because of increased penetration potential. Seek immediate medical attention if irritation persists. Wash clothing and thoroughly clean shoes before reuse.
Inhalation:	Move to fresh air. Seek immediate medical attention if breathing difficulties develop.
Ingestion:	If excessive quantities are swallowed, do not induce vomiting, seek immediate medical attention.

SECTION 5 – FIRE FIGHTING MEASURES

Flash Point (°F):	>100°C (Closed Cup)
Flash Point Category (OSHA/NFPA):	IIIB

Hazardous Products of Combustion: Hydrocarbons; carbon monoxide (CO); carbon dioxide; smoke; soot.

Extinguishing Media: Use NFPA Class B Fire extinguishers (carbon dioxide, all purpose dry chemical or alcohol foam) designed to extinguish flammable liquid fires. Polymer foam is preferred for large fires.

Unusual Fire and Explosion Hazards: There is a possibility of pressure build-up in containers when heated. This product may support combustion and may be ignited by extreme heat or flame.

Fire Fighting Procedures: The use of self-contained breathing apparatus is recommended for firefighters. Water may be ineffective, but may be used to cool exposed containers to prevent pressure build-up and possible auto-ignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Precautions in Case of Release or Spill: Keep unnecessary personnel away from spill area. Ventilate area of spill. Use appropriate personal protective equipment. Soak up small spill with inert material (if large spill, dike area). Pick up bulk of spill and containerize for recovery or disposal. Wash spill area with strong detergent and water. Keep all materials out of drains, sewers or waterways.

UV/EB curable products will not dry by evaporation. It is important that any spills be completely cleaned; otherwise these products will remain a continued source of exposure.

Waste Disposal Method: Dispose of product in accordance with local, county, state and federal regulations.

SECTION 7 – HANDLING AND STORAGE

Handling and Storage: Store in compatible metal or opaque HDPE containers in an adequately ventilated area away from light. UV/EB curable products are reactive and may degrade or polymerize when stored for extended periods of time under conditions of extreme heat. In order to prolong the shelf-life, it is recommended that containers of these products be stored at temperatures between 40F and 115F (4.5C – 45C).

Other Precautions: Protect from freezing.
Use and store the product with adequate ventilation.
Close container after each use.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTIONS

ENGINEERING MEASURES

Provide readily accessible eye wash stations and safety showers.
Provide adequate general and/or local exhaust ventilation.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: No special requirements under conditions of intended use. General room ventilation is adequate. If this material is handled at elevated temperatures, under mist forming conditions or in confined areas where high exposure situations may exist, a NIOSH/MSHA approved respiratory protection equipment should be used.

Skin Protection: Barrier cream (applied before exposure) should be used along with impervious gloves. Use a chemical resistant apron and face shield if a splash hazard exists.

Eye Protection: Safety glasses, full face shield or chemical safety goggles is recommended to prevent eye contact. Eye protection should meet the specifications of ANSI Z87.1

Hexamethylene Diacrylate AIHA WEEL: 1mg/m³; skin*; 8-hr TWA
*skin absorption of this material may add to the overall exposure

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point (°F):	Not Determined	VOC (Lbs/Gal):	0.10
% Volatile by Volume:	0.90%	Vapor Density:	Heavier Than Air
Specific Gravity:	1.04	Evaporation Rate:	Not Applicable
Odor:	Acrylate	pH:	Not Applicable
Appearance:	Milky White Liquid	Lbs. Per Gallon:	8.70

The US EPA has determined that Method 24 analysis on the uncured product is inappropriate. The EPA suggests that the test be modified to evaluate cured products. Average Method 24 VOC values for the cured products are less than 1.0%.

SECTION 10 – STABILITY AND REACTIVITY

Stability: Normally stable under normal conditions of storage and intended use. However, polymerization may occur if the product is exposed to extreme heat or incompatible materials.

Conditions to Avoid: Avoid excessive heat (>140F) and sources of ignition. Avoid storage above 115F (45C), exposure to light, loss of dissolved air, loss of polymerization inhibitor and contamination with incompatible materials.

Incompatibility: Strong acids, strong bases, oxidizing agents, polymerization initiators, copper, copper alloys, carbon steel, iron and rust.

Hazardous Decomposition Products: Carbon dioxide and carbon monoxide.

SECTION 11 – TOXICOLOGICAL INFORMATION

Information pertaining to the health effects and toxicity of the “pure” form of the hazardous components identified in Section 2 is presented below. This information reflects the known hazards associated with the component and may not reflect that of the purchased material due to concentration (dilution) effects. Review and interpretation by your Hazard Communication Department is recommended.

Trimethylol Propane Ethoxy Triacrylate

Acute animal toxicity data: Moderately irritating to eyes (rabbit). Moderately irritating to skin (rabbit). Repeated skin exposure produced irritation in animal studies. Practically non-toxic following oral administration (rat).

Proprietary Material

May cause mild to moderate eye and skin irritation. Skin contact may also cause skin sensitization.

Hexamethylene Diacrylate

Acute animal toxicity data: Mildly irritating to eyes (rabbit). Highly irritating to skin (rabbit). Repeated skin exposure produced dermal sensitization in animal studies (guinea pig). Practically non-toxic following oral administration (rat).

Carcinogenicity: mouse, dermal, , no tumors

Mutagenicity: both positive and negative responses observed in standard tests for genetic changes.

Hydrated Amorphous Silica

Mildly irritating to eyes. Mildly irritating to skin.

Acute Inhalation LC50: Nuisance dust

Acute Dermal LD50: N/A

Acute Oral LD50: Estimated >5g/kg. Not significantly toxic

Dipropylene Glycol Diacrylate

Acute animal toxicity data: Moderately irritating to eyes (rabbit). Moderately irritating to skin (rabbit).

Repeated skin exposure produced irritation in animal studies. Practically non-toxic following oral administration (rat).

Amine Acrylate

Acrylated amines generally exhibit moderate toxicity. Some substances in this class of materials have indicated limited evidence of mutagenicity in "in vitro" tests. Limited studies indicated no evidence of teratogenicity in animals. A lifetime painting study with mice indicated no evidence of carcinogenicity.

Benzophenone

Acute animal toxicity data: Slightly irritating to eyes (rabbit). Slightly irritating to skin (rabbit). Practically non-toxic following oral administration (rat).

SECTION 12 – ECOLOGICAL INFORMATION
Trimethylol Propane Ethoxy Triacrylate

No information available.

Proprietary Material

No information available.

Hexamethylene Diacrylate

Environmental Toxicity:

Invertebrates: 48h, LC50 Water flea (daphnia magna) 6.1 mg/l

Fish: 96h, LC50 Fish 2.1 mg/l

Algae: 96h, EC50 Algae 0.67mg/l

Hydrated Amorphous Silica

Environmental Toxicity:

Invertebrates: 24h, EC50 Water flea (Daphnia magna) >1000ppm

Fish: 96h, EC50 Fish >10,000ppm

Dipropylene Glycol Diacrylate

No information available.

Amine Acrylate

No information available.

Benzophenone

Environmental Toxicity:

Invertebrates: 24h, EC50 Water flea (Daphnia magna) <1mg/l

Fish: 96h, LC50 Fish 15.3mg/l

SECTION 13 – DISPOSAL CONSIDERATIONS

Dispose of product in accordance with local, county, state and federal environmental regulations. Do not introduce this product directly into public sewer systems.

Since emptied containers may retain product residues, all hazard precautions given in this data sheet should be observed.

SECTION 14 – TRANSPORTATION INFORMATION

US DOT Hazard Classification: Non-Regulated

IMDG Hazard Classification: Non-Regulated

IATA Hazard Classification: Non-Regulated

Canadian TDG Hazard Classification: Non-Regulated

SECTION 15 – REGULATORY INFORMATION**Toxic Substances Control Act (TSCA)**

The chemical components of this product are listed or have been registered for inclusion on the Section 8(B) Chemical Substance Inventory List (40 CFR 710).

EPA SARA Title III Section 313 (40 CFR 372) Component(s) above 'de minimus' level:

This product does not contain any chemicals in quantities which must be reported under the supplier notification requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986.

California Proposition 65

This product does not contain any chemicals which are defined by the state of California to cause cancer and/or reproductive toxicity.

Clean Air Act Amendment (HAPs)

This product does not contain any chemicals which are defined as Hazardous Air Pollutants under Title III of the Clean Air Act Amendments of 1990.

CONEG

This product is certified to be in full compliance with CONEG Model Toxics Legislation for packaging and packaging components.

SECTION 16 – OTHER INFORMATION**Controlled Products Regulations (CPR)**

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

Product Use: Radiation curable coating

Reason for revision: Update Section 7, Handling & Storage

	Health	Fire	Reactivity	Additional Information
Suggested NFPA Rating	2	1	2	
Suggested HMIS Rating	2	1	2	B

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