Thin Film UVX – Material Safety Data Sheet

Revision Date 05/08/17

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION
PRODUCT: UVX™
MANUFACTURER: Thin Film Partners LLC
ADDRESS: 2976 E. State Street #120-32, Eagle, Idaho 83616
PHONE: 206-257-9787
REVISION DATE: 10/09/2016
PRODUCT USE: Protective Barrier or liquid repellant Coating.

SECTION 2: INGREDIENTS
<table>
<thead>
<tr>
<th>INGREDIENT</th>
<th>Wt%</th>
<th>C.A.S. NUMBER</th>
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<tbody>
<tr>
<td>Perfluoropolyether hexa-acrylate</td>
<td>70-100</td>
<td>Proprietary</td>
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<tr>
<td>Pentaerythritol acrylate</td>
<td>10</td>
<td>4986-89-4</td>
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SECTION 3: HAZARDS IDENTIFICATION
Primary Entry Routes: Skin, inhalation
Skin: Contact with the skin during product use may result in redness and slight irritation.
Inhalation: Vapors from heated material or aerosols may case respiratory irritation if inhaled.
Eye: Contact with the eyes during product use may result in slight irritation.
Ingestion: Nausea, vomiting, and diarrhea.
Carcinogenicity: Not expected.
Medical Conditions Aggravated by Long-Term Exposure: None expected.
Chronic Effects: None expected.

SECTION 4: FIRST AID MEASURES
Eye Contact: In case of eye contact, immediately flush eyes with plenty of water for 15 minutes. Call a physician.
Skin Contact: In case of skin contact, flush with water. Get medical attention if irritation is present.
Inhalation: If high concentrations are inhaled, immediately remove to fresh air. Keep persons calm. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
Ingestion: Drink 1 or 2 glasses of water. Do not induce vomiting. If symptoms persist call a physician.

SECTION 5: FIRE FIGHTING MEASURES
Autoignition temperature: not determined
Flash Point: not determined but expected to be high, not flammable.
Flammable Limits: LEL Not determined, but product is not volatile
Flammable Limits: UEL Not determined, but product is not volatile
Extinguishing Media: Water spray, foam, powder, dry chemical or CO2 blanket.
Fire Fighting Procedures: Water may be used to blanket the fire. Exposure to extreme heat can give rise to thermal decomposition. Wear full protective equipment and a self-contained breathing apparatus.
Combustion and Explosion Hazards: No explosion hazards are anticipated. Avoid breathing the products and substances that may result from the thermal decomposition of the product or the other substances in the fire zone.

SECTION 6: ACCIDENTAL RELEASE MEASURES
Accidental Release Measures: Observe precautions from other sections. Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air. Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Clean up residue with an appropriate organic solvent. Place in a metal container approved for transportation by appropriate authorities. Seal the container. Dispose of collected material as soon as possible. Gaseous hydrogen fluoride may be produced at temperatures > 250°C.

SECTION 7: HANDLING AND STORAGE
Handling: No special handling advice required. Store work clothes separately from other clothing, food and tobacco products. No smoking: Smoking while using this product can result in the formation of the hazardous decomposition products. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below...
Occupational Exposure Limits. If ventilation is not adequate, use respiratory protection equipment. Avoid continuous exposure of the material to heat above 200°C.
Storage: Keep container tightly closed. Store in dark containers away from light. Keep container in well-ventilated area. Store away from heat or ignition sources. Store away from strong bases or alkali metals.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
Engineering Controls: Use with appropriate local exhaust ventilation. Provide local exhaust ventilation at transfer points. Provide appropriate local exhaust when product is heated.
Eye and Face Protection: Avoid eye contact. Use Safety Glasses with side shields.
Skin Protection: Avoid skin contact with hot material. Wear Nitrile gloves when handling this material to prevent thermal burns.
Respiratory Protection: Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection. If thermal degradation products are expected, use full face supplied air respirator.
Prevention of Swallowing: Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

Exposure Guidelines for decomposition product Hydrogen Fluoride:
TLV-TWA (ACGIH): 0.5ppm
PEL-TWA (OSHA): 3ppm

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES
Specific Physical Form: Clear, viscous liquid
Odor, Color, Grade: Clear with slight acrylate odor.
General Physical Form: Liquid
Autoignition temperature: ND
Flash Point: None
Flammable Limits: ND
Boiling point: Decomposes above 300°C
Density: 1.4 g/ml
Vapor Density: NA
Vapor Pressure: NA
Specific Gravity: 1.4
pH: NA
Freezing point: NA
Solubility In Water: Not soluble
Evaporation rate: NA
Percent volatile: 0%

SECTION 10: STABILITY AND REACTIVITY
Stability: Stable.
Materials and Conditions to Avoid: Strong bases and alkali metals, Lewis acids, Al and Mg powder > 100°C.
Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition: Hydrogen fluoride has an ACGIH Threshold Limit Value of 3 parts per million (as fluoride) as a Ceiling Limit and an OSHA PEL of 3 ppm of fluoride as an eight hour Time-Weighted Average and 6 ppm of fluoride as a Short Term Exposure Limit. The odor threshold for HF is 0.04 ppm, providing good warning properties for exposure.

SECTION 11: TOXICOLOGICAL INFORMATION
Ecotoxicity effects: No available data
Carcinogenicity: No ingredients are listed by NTP, IARC or OSHA as carcinogens.

SECTION 12: ECOLOGICAL & ECOTOXICOLOGICAL INFORMATION
No available data.

SECTION 13: DISPOSAL CONSIDERATIONS
Waste Disposal Method: Reclaim if feasible. As a disposal alternative, incinerate in an industrial or commercial facility in the presence of a combustible material. Combustion products will include HF.

EPA Hazardous Waste Number: Not regulated

SECTION 14: TRANSPORT INFORMATION
UN No.: Not established
ADR / RID Status: Not regulated
IMDG Status: Not regulated
ICAO / IATA Status: Not regulated
US DOT Status: Not regulated.

SECTION 15: REGULATORY INFORMATION
TSCA Status: These chemicals are in compliance with the TSCA Inventory.
SARA Section 302: None of the chemicals are Section 302 hazard.
SARA Section 311, 312:
Acute = No
Chronic = No
Fire = No
Reactivity = No
Pressure = No
SARA Section 313 = No
OSHA Regulations: This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR1910.1200.

SECTION 16: OTHER INFORMATION
NFPA Hazard Classification: Health: 1 Flammability: 0 Reactivity: 0 Special Hazards: None
HMIS Hazard Classification: Health: 1 Flammability: 0 Reactivity: 0 Protection: X - See PPE section.

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