

SAFETY DATA SHEET



Date Prepared 3/14/2011
Date Revised 6/18/2021

UVA-TECH

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: UVA-TECH
PRODUCT FAMILY: URETHANE/ACRYLATE
PRODUCT USE(S): RADIATION SURFACE CURABLE COATING
MOLECULAR FORMULA: MIXTURE
RESTRICTIONS ON USE(S): NO DATA AVAILABLE

MANUFACTURER
MIRABEL COATINGS, INC.
2035 W. MCDOWELL RD.
PHOENIX, AZ 85009
(480) 837-5333

24 HR. EMERGENCY CONTACT NUMBERS
MIRABEL COATINGS: 480-837-5333

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION

Reproductive Toxicant Category 1B
Specific Target Organ Toxicity - Single Exposure Hazard Category 3
Serious Eye Damage / Eye Irritation Hazard Category 2A
Skin Sensitizer Hazard Category 1B
Skin Corrosion / Irritation Hazard Category 2

GHS LABEL ELEMENTS HAZARD PICTOGRAMS:



SIGNAL WORD:

DANGER

HAZARD STATEMENTS:

Harmful if swallowed.
Harmful in contact with skin.
May cause drowsiness or dizziness.
May cause respiratory irritation.
Causes severe skin burns and eye damage.
Causes serious eye irritation.

PRECAUTIONARY STATEMENTS

Prevention:

Wash skin and face thoroughly after handling.
Wear protective gloves/clothing/eye protection/face protection.
Avoid release to the environment
Avoid breathing vapor.
Do not eat, drink or smoke when using this product.

Response:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call POISON CENTER or physician.
IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash before reuse. If skin irritation occurs: Get medical attention.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician.
IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting.

Hazards Not Otherwise Classified (HNOC), Other Hazards

Polymerization may occur from excessive heat, contamination or exposure to direct sunlight.

Storage:

Store locked up.
Store in a well-ventilated place. Keep container tightly closed.

Disposal:

Dispose of contents and container in accordance with existing federal, state, and local environmental control laws.

3. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE/MIXTURE: Mixture

Hazardous Components

Weight Percent	Components	CAS No.	Classification
Trade Secret	Acrylic Polymer	Trade Secret	Skin irritant 3 Eye irritant 2A
Trade Secret	Acrylic Monomer	Trade Secret	Skin irritant 2
Trade Secret	Photoinitiator	Trade Secret	Skin sensitizer 1B

The specific chemical identity and/or exact percentage of component(s) have been withheld as a trade secret. Occupational exposure limits, if available, are in Section 8.

4. FIRST AID MEASURES

- EYES:** Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 15 minutes. Chemical burns must be treated promptly by a physician.
- SKIN:** Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- INGESTION:** Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- INHALATION:** Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

MOST IMPORTANT SYMPTOM(S)/EFFECT(S)

ACUTE: Causes serious eye damage.

May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Causes severe burns. May cause an allergic skin reaction.

Harmful if swallowed. May cause burns to mouth, throat and stomach.

OVER-EXPOSURE SIGNS/SYMPTOMS

- EYES:** Pain
Watering
Redness
- IHALATION:** N/A
- SKIN CONTACT:** Pain / Irritation
Redness
Blistering may occur
- INGESTION:** Stomach pains

NOTES TO PHYSICIAN

Symptomatic and supportive therapy as needed. Following severe exposure medical follow-up should be monitored for at least 48 hours.

5. FIREFIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Use an extinguishing agent suitable for the surrounding fire.
Water spray/fog, carbon dioxide, or dry chemical.

UNSUITABLE EXTINGUISHING MEDIA: High pressure water jet.

FIRE FIGHTING PROCEDURE

Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. Use cold water spray to cool fire-exposed containers to minimize risk of rupture. During a fire, toxic vapors and other irritating, highly toxic gases may be generated by thermal decomposition or combustion.

HAZARDOUS DECOMPOSITION PRODUCTS

By Fire and Thermal Decomposition: Carbon dioxide (CO₂), carbon monoxide (CO), Nitrogen oxides (NO_x), Hydrogen cyanide (HCN), halogenated compounds.

UNUSUAL FIRE/EXPLOSION HAZARDS

Toxic and irritating gases/fumes may be given off during burning or thermal decomposition. Closed containers may forcibly rupture under extreme heat or when contents are contaminated with water (CO₂ formed). Use cold-water spray to cool fire-exposed containers to minimize risk of rupture.

6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK PROCEDURES

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

7. HANDLING AND STORAGE

Handling/Storage Precautions

Handle in accordance with good industrial hygiene and safety practices. Wash thoroughly after handling. Wash contaminated clothing before reuse. Keep container closed when not in use. Avoid breathing dust, vapor, or mist. Avoid contact with eyes.

STORAGE PERIOD:

12 Months @ 25°C (77°F) after receipt of material by customer

Max Temperature: 38°C (100°F)

STORAGE CONDITIONS:

Store separate from food products.

Do not use nitrogen blanket (maintain dissolved air). Heat only at temperature less than max temp. (above).

Never use steam or electronic heat (tapes, mantles or jackets) to heat this product.

Employee education and training in the safe use and handling of this product are required under the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Exposure to sunlight or radiation. Exposure will cure the material.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**ENGINEERING CONTROLS:**

If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

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PERSONAL PROTECTIVE EQUIPMENT**RESPIRATORY**

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

HAND PROTECTION

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. > 8 hours (breakthrough time): butyl rubber, Ethyl Vinyl Alcohol Laminate (EVAL), nitrile rubber, neoprene, Polyvinyl Chloride (PVC)

EYE PROTECTION

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

SKIN PROTECTION

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

ADDITIONAL PROTECTIVE MEASURES

Emergency showers and eye wash stations should be available. Educate and train employees in the safe use and handling of this product. Follow all label instructions.

WORK HYGIENE PRACTICES

Use good personal hygiene when handling this product. Wash hands after use, before eating, drinking, smoking, or using the toilet.

COMMENTS

May be harmful or fatal if swallowed. May irritate body tissues. Use with adequate ventilation. Avoid breathing vapor. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Liquid
ODOR:	Amine
APPEARANCE:	Clear/Amber
pH:	No Data Available
BOILING POINT:	>150°C (>302°F)
FLASH POINT:	Closed cup: >100°C (>212°F)
MELTING POINT:	No Data Available
EVAPORATION RATE:	No Data Available
LOWER EXPLOSION LIMIT:	No Data Available
UPPER EXPLOSION LIMIT:	No Data Available
VAPOR PRESSURE:	No Data Available
VAPOR DENSITY:	No Data Available
RELATIVE VAPOR DENSITY:	No Data Available
SPECIFIC GRAVITY:	approx. 1.1 @ 25°C (77°F)
SOLUBILITY IN WATER:	Insoluble
AUTO-IGNITION TEMPERATURE:	No Data Available
DECOMPOSITION TEMPERATURE:	No Data Available
VISCOSITY:	No Data Available
MOLECULAR WEIGHT:	No Data Available
POUR POINT:	No Data Available
VOC:	< 6.75 g/L
HAPS:	< 11.27 G/L

10. STABILITY AND REACTIVITY

HAZARDOUS REACTIONS

No specific test data related to reactivity available for this product or its ingredients.

STABILITY

Stable under normal conditions of use and storage.

MATERIALS TO AVOID

Peroxids, free radical initiators (ultra violet radiation), reactive metals (catalysts), alkalis. These materials will cause a reaction that is unwanted.

CONDITIONS TO AVOID

Exposure to sunlight and ultra violet radiation will cure cure materials. Heat and Flames. Drum Heaters. Freezing conditions, and inert gas blanketing. Loss of polymerization inhibitor.

HAZARDOUS DECOMPOSITION PRODUCTS

By Fire and Thermal Decomposition: Carbon oxides, Nitrogen oxides (Nox), Hydrogen cyanide (HCN), other undetermined compounds.

11. TOXICOLOGICAL INFORMATION

TOXICITY DATA FOR ACRYLIC POLYMER

TOXICITY NOTE

Likely routes of exposure include: Skin, eyes, oral.

ACUTE ORAL TOXICITY

LD50: > 2000 mg/kg (rat, male) (OECD Test Guideline 401)

ACUTE INHALATION TOXICITY

LC50: > 5 mg/l (rat, male/female, 4hr, dust/mist)

ACUTE DERMAL TOXICITY

LD50: > 2000 mg/kg (rabbit, male)

LOCAL EFFECTS ON SKIN AND EYE

Eyes: Irritating (acute)

Dermal: No data

ALLERGIC SENSITIZATION

Skin: Sensitizing

Respiratory: No data

GENOTOXICITY

Assays for Gene Mutation: No data

CARCINOGENICITY

No data

HAZARDOUS INGREDIENT TOXICITY DATA

Acrylic Polymers (mixture of acrylic polymers) have acute dermal (rabbit) LD50 value of > 13g/kg. Direct contact with this material may cause moderate eye and mild skin irritation. Repeated or prolonged skin contact may cause allergic skin reactions. Results from in vitro mutagenicity tests are mixed. This substance was not mutagenic in the Ames

Salmonella Assay, however, it was mutagenic in various cell culture systems (i.e. Mouse lymphoma Assay). An in vivo mouse micronucleus study, designed to assess the clastogenic potential in whole animals, was negative for mutagenicity. Therefore, based on a weight-of-the-evidence approach, this material is considered non-mutagenic.

TOXICITY DATA FOR ACRYLIC MONOMER

TOXICITY NOTE

Likely routes of exposure include: Skin, eyes, oral.

ACUTE ORAL TOXICITY

LD50: > 2000 mg/kg (rat, male) (OECD Test Guideline 401)

ACUTE INHALATION TOXICITY

LC50: > 5 mg/l (rat, male/female, 4hr, dust/mist)

ACUTE DERMAL TOXICITY

LD50: > 2000 mg/kg (rabbit, male)

LOCAL EFFECTS ON SKIN AND EYE

Eyes: Irritating (acute)

Dermal: Irritating (acute)

ALLERGIC SENSITIZATION

Skin: Not sensitizing

Inhalation: No data

GENOTOXICITY

Assays for Gene Mutation: No data

CARCINOGENICITY

No data

OTHER INFORMATION

The product toxicity information above has been estimated.

Contact with skin may cause a cross-allergic reaction in persons already sensitized to acrylates.

Prolonged or repeated contact with skin or mucous membrane may result in irritation symptoms such as redness, blistering, dermatitis, etc.

The inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.

HAZARDOUS INGREDIENT TOXICITY DATA

The toxicological properties of Acrylic monomer have not been fully investigated. Direct contact with this material may cause moderate eye and skin irritation.

TOXICITY DATA FOR PHOTOINITIATOR

ACUTE ORAL TOXICITY

LD50: > 2500 mg/kg (rat, male) (OECD Test Guideline 401) (not sufficient for classification)

ACUTE INHALATION TOXICITY

LC50: > 1 mg/l (rate, dust/mist, 4hrs) (not sufficient for classification)

ACUTE DERMAL TOXICITY

LD50: > 5000 mg/kg (rat) (not sufficient for classification)

SKIN CORROSION/IRRITATION

Not irritating.

SERIOUS EYE DAMAGE/IRRITATION

Slightly irritating

RESPIRATORY OR SKIN SENSITIZATION

Respiratory: No data

Skin: Guinea pig test - not sensitizing.

GERM CELL MUTAGENICITY

Ames Test: Negative

CARCINOGENICITY

No data

REPRODUCTIVE TOXICITY

No data

SPECIFIC TARGET ORGAN TOXICITY

Specific target organ toxicity (single exposure): No data

Specific target organ toxicity (repeated exposure): NOAEL 300 mg/kg Oral / Rat - No specific target organs

ASPIRATION HAZARD

Conclusive data but not sufficient for classification

12. ECOLOGICAL INFORMATION

TOXICITY, PERSISTENCE AND DEGRADABILITY, BIOACCUMULATIVE POTENTIAL, MOBILITY IN SOIL, OTHER ADVERSE EFFECTS

The ecological properties of this material have not been fully investigated.

RESULTES OF PBT AND vPvB ASSESSMENT

This product does not meet the criteria for PBT (Persistent, Bioaccumulative and Toxic substance) or for vPvB (Very persi

HAZARDOUS INGREDIENT TOXICITY DATA

COMPONENT	TOXICITY		
	ALGAE	FISH	WATER FLEA
Acrylic Polymer	EC50 = 2.2 mg/l	LC50 = 1.95 mg/l	EC50 70.7g/l
Acrylic Monomer	No data	LC50 = 2 mg/l	No data
Photoinitiator	EC50 = 14.4 mg/l	LC50 = 24 mg/l	No data

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste disposal should be in accordance with existing federal, state and local environmental control laws. Incineration is the preferred method. Do not dump into sewers, ground, or any body of water.

EMPTY CONTAINER PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue; observe all precautions for product. Do not heat or cut empty container with electric or gas torch because highly toxic vapors and gases are formed. Do not reuse without thorough commercial cleaning and reconditioning. If container is to be disposed, ensure all product residues are removed prior to disposal.

RCRA/EPA WASTE INFORMATION

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

14. TRANSPORT INFORMATION

LAND TRANSPORT (DOT)

PROPER SHIPPING NAME:

UVA-TECH - NON REGULATED

HAZARD CLASS OR DIVISION:

Not Regulated

UN/NA NUMBER:

Not Regulated

PACKAGING GROUP:

Not Regulated

HAZARD LABEL(S):

Not Regulated

ENVIRONMENTAL HAZARDS:

Not Regulated



RSPA/DOT REGULATED COMPONENTS:

None listed

REPORTABLE QUANTITY:

No Data Available

SEA TRANSPORT (IMDG):

See Additional Transportation Information (Below)

ADDITIONAL TRANSPORTATION INFORMATION

DOT : Not Regulated

TDG : Not Regulated

IMDG: Not Regulated

IATA : Not Regulated

15. REGULATORY INFORMATION

UNITED STATES FEDERAL REGULATIONS

US. TOXIC SUBSTANCES CONTROL ACT:

All components are listed or exempted.

TSCA 5(a)2 final significant new use rule (SNUR)

No ingredients listed

TSCA 5(e) substance consent order

No ingredients listed

TSCA (12b) export notification

No ingredients listed

Clean Air Act - Ozone Depleting Substances (ODS)

This product does not contain nor is it manufactured with ozone depleting substances.

US. EPA CERCLA HAZARDOUS SUBSTANCES (40 CFR 302) COMPONENTS:

none listed

SARA SECTION 311/312 HAZARD CATEGORIES:

Immediate (acute) health hazard

US. EPA EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT (EPCRA) SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCE (40 CFR 355, APPENDIX A) COMPONENTS:

None

US. EPA EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT (EPCRA) SARA TITLE III SECTION 313 EXTREMELY HAZARDOUS SUBSTANCE (40 CFR 372.65) - SUPPLIER NOTIFICATION REQUIRED COMPONENTS:

None

US. EPA RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) COMPOSITE LIST OF HAZARDOUS WASTES AND APPENDIX VIII HAZARDOUS CONSTITUENTS (40 CFR 261):

Under the RCRA, it is the responsibility of the person who generates a solid waste, as defined in 40 CFR 261.2, to determine if that waste is a hazardous waste. If discarded in purchased form this product is ignitable, hazardous waste.

STATE RIGHT-TO-KNOW INFORMATION

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the SDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

PENNSYLVANIA - RTK

None

CALIFORNIA PROP. 65:

This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

Based on information provided by our suppliers, this product is considered "DRC Conflict free" as defined by the SEC Conflict Minerals Final Rule (Release No. 34-67716; File No. S7-40-10; Date: 08-22-2012).

Canadian Regulations

CEPA DSL

All components are listed or exempted

WHMIS Classes

All components are listed or exempted

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

Brazil Regulations

Classification system used

All components are listed or exempted

International Lists

Australia Inventory (AICS)

All components are listed or exempted

China Inventory (IECSC)

All components are listed or exempted

Japan Inventory

All components are listed or exempted

Korea Inventory

All components are listed or exempted

Malaysia Inventory (EHS Register)

Not determined

New Zealand Inventory of Chemicals (NZIoC)

All components are listed or exempted.

Philippines Inventory (PICCS)

All components are listed or exempted.

Taiwan Inventory (CSNN)

Not determined

16. OTHER INFORMATION

The method of hazard communication for Mirabel Coatings, Inc. is comprised of Product Labels and Safety Data Sheets (SDS).

These products are recommended only for use in industrial or trade (commercial) applications. They are not suitable for use in Do-It-Yourself applications.

NFPA CODES:**DATE REVISED:**

6/18/2021

REVISION SUMMARY:

Updated Section 9: VOC & HAPS Data.

MANUFACTURER DISCLAIMER:

The information contained herein is based on the data available to us and is believed to be accurate. However, Mirabel Coatings, Inc. makes no warranty, expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. The information in this SDS relates only to the specific material designated herein. Mirabel Coatings, Inc. assumes no legal responsibility for use of or reliance upon the information in this SDS, nor for injuries from the use of the product described herein.