

MATERIAL SAFETY DATA SHEET

OSHA/ANSI 2003 Compliant

HMIS RATING: Health: 2 Flammability: 1 Reactivity: 1 Personal Protection: B

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: VERSACOAT HIGH GLOSS TOP COAT FOR DIGITAL PRINTS
Product Number: ICUVVCDG-1G

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Signal Word: NOTICE!
Physical Form: Mobile liquid
Color: Light amber
Odor: Mild Acrylic
Health: Moderate eye irritant and mild skin sensitizer; this product may cause allergic skin reactions upon repeated or prolonged skin contact based on animal studies. Swallowing small amount of this material may not be harmful, though large amounts may be harmful. May irritate mouth, throat and gastrointestinal tract.
Physical Hazards: See Section 7 of this MSDS for handling information
Environmental: Caution – substance not yet fully tested. Releases to the environment are to be avoided.
OSHA Hazardous Substance: This material is classified as not hazardous under OSHA regulations.
Primary Route(s) of Entry: Ingestion, Skin, Inhalation and Eyes.

3. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS:

Components	CAS Number	Weight, %
Acrylate Monomers & Oligomer	Trade Secret	Trade Secret

4. FIRST AID MEASURES

Eyes: Rinse immediately with plenty of fresh water, with eyelids held open. Seek medical advice.

Skin: Removed contaminated clothing. Wash exposed area with soap and water. If irritation develops, seek medical attention. Launder clothing before re-use. Dispose of shoes that have been contaminated on inner surfaces.

Inhalation: If symptoms develop, move individual away from exposure and into fresh air; give artificial respiration if not breathing. If symptoms persist, seek medical attention. Administer oxygen if breathing is difficult. Keep person warm and quiet; seek immediate medical attention.

Ingestion: Seek medical attention immediately. DO NOT INDUCE VOMITING. If individual is drowsy or unconscious, do not give anything by mouth; place individual on left side with head down. Contact physician, medical facility or poison control center. If vomiting occurs naturally, have person lean forward to reduce the risk of aspiration. Clean mouth with water if possible. DO NOT DRINK WATER until medical attention has been obtained and such action is so advised.

5. FIRE FIGHTING MEASURES

Fire Fighting Measures: Standard procedure for Chemical Fires

Suitable Extinguishing Media: Carbon Dioxide, Dry Chemical, Foam or Water Spray

Fire Fighting Equipment: Wear self-contained breathing apparatus and protective suit.

Unusual Hazards: Fire may cause CO_x and/or NO_x to evolve. Do not use welding or cutting torch on or near product as residue can ignite. High temperatures and fire conditions may cause polymerization. Polymerization is a highly exothermic reaction and may produce sufficient heat to cause thermal decomposition and/or rupture of containers. Thermal decomposition can lead to the evolution of irritant vapors or gases and/or fires.

Hazardous Combustion Products: Carbon Dioxide and carbon monoxide. .

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Ensure adequate ventilation. Keep people away/upwind from any spill or leak. Wear proper personal protective clothing and equipment.

Environmental Precautions: Avoid subsoil penetration. Do not flush spill into public sewer, water systems, or surface waters. Advise water authority if spillage has entered into water course or drainage system.

Cleanup Instructions: Ventilate areas of spill and stop spill at the source, or move leaking containers to ventilated area. Cover sewer grates and dike the spill. DO NOT FLUSH TO SEWER. Absorb remainder with an inert material. Shovel and place all absorbed and spilled materials into labeled, closed container tightly; store in safe location to await disposal. Remove all ignition sources.

Evacuation Instructions: Not Applicable.

7. HANDLING AND STORAGE

Handling: As with all industrial chemicals, use good industrial practices when handling. Avoid eye, skin, and clothing contact. Do not inhale aerosol, mist, vapor, fume or spray. Do not taste or swallow. Use only with adequate ventilation. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing and wash before re-use. Shower after work using plenty of soap and water. Keep away from sources of heat and ignition.

Storage: Keep containers tightly closed in a dry, cool, well-ventilated area away from direct heat and sunlight. Store away from foodstuffs, alkaline substances and other materials likely to initiate polymerization. Do not store near high heat or open flames. May stratify or congeal if stored in extreme cold. Allow to warm to room temperature before use.

FOR INDUSTRIAL USE ONLY!

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Listed Carcinogenicity: IARC – No NTP – No OSHA - No

Exposure Guidelines:

Adequate ventilation must be provided to keep mist concentration below PEL (personal exposure limits). This material or its emissions may defat skin, cause contact dermatitis, or otherwise aggravate existing skin disease.

Personal Protective Equipment

Eye/Face Protection: Safety glasses with side shields in compliance with OSHA regulations. Wear tight fitting chemical safety goggles or a face shield whenever there is the possibility of splashing or other contact with eyes.

Skin Protection: Wear chemical resistant gloves (neoprene) and protective clothing.

Respiratory Protection: Use NIOSH approved respirator as needed to mitigate exposure.

Engineering Controls: Work in well ventilated area. Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the MSDS. Do not breathe vapors, fumes, mists, or spray.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form:	Mobile liquid
Color:	Light Amber
Odor:	Mild Acrylate
Solubility in Water:	Insoluble
Vapor Pressure:	>1
Vapor Density:	>1
Specific Gravity: (H ₂ O=1)	>1.0 g/cm ³
pH:	Not determined

Percent Volatile:	0 to Nil
VOC:	0 to nil
Solids Content	100%
Evaporation Rate:	<1
Boiling Point:	>200°C
Flash Point:	>94°C (200°F) seta flash

10. STABILITY AND REACTIVITY

- Stability:** Material is stable under normal conditions of use.
- Conditions to Avoid:** Do not expose to temperatures over 28°C (100°F) or below 5°C (40°F).
 Avoid exposure to dirt or chemical contamination.
- Incompatibility:** Avoid contact with polymerization initiators including peroxides, copper, iron, rust and strong bases
- Hazardous Decomposition Products:** Carbon monoxide, Carbon Dioxide.
- Possibility of Hazardous Reactions:** Polymerisation may occur. Avoid polymerization initiators and storage above 38°C(100°F). Maintain air space in containers. Do not blanket with nitrogen or other inert gases

11. TOXICOLOGICAL INFORMATION

Acute Oral, Dermal, Inhalation Toxicity:

Proprietary Monomers, Oligomers	LD50/oral/rat = >2000 mg/kg (literature)
Photoinitiator Package	LD50/oral/rat = 1376 mg/kg LD50/dermal/rat = 6930 mg/kg
Stabilizer Package	Not determined

Eye Irritation:

Proprietary Monomers, Oligomers	Mild Eye Irritation (Literature)
Photoinitiator Package	None
Stabilizer Package	Not determined

Skin Irritation:

Proprietary Monomers, Oligomers	Moderate skin irritation (Literature)
Photoinitiator Package	None
Stabilizer Package	Not Determined

Skin Sensitization:

Proprietary Monomers, Oligomers	Mild Skin Irritation by contact (Literature)
Photoinitiator Package	Skin Sensitization/Maximization test (OECD 406): Negative
Stabilizer Package	Non Sensitizing (Guinea Pig, OECD 406)

Carcinogenicity (IARC, NTP, OSHA, ACGIH): None of the components in this product at concentrations greater than 0.1% are listed by IARC, NTP, OSHA, or ACGIH as a carcinogen.

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Mutagenicity:

Proprietary Monomers, Oligomers	Not Determined
Photoinitiator Package	Ames Test: Negative
Stabilizer Package	Not determined

12. ECOLOGICAL INFORMATION

Ecological Toxicity:

Proprietary Monomers, Oligomers	Not Determined
Photoinitiator Package	LC50/96f/goldfish = 160 gm/l. Bioconcentration Factor (BCF): 28d = 59%
Stabilizer Package	Products are considered to be w weak water pollutant

Toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment.

Additional Environmental Data: Prevent product from entering drainage systems, etc.

13. DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose in accordance with local, state, provincial and federal regulations. Waste materials should be dumped or buried in an approved landfill, or incinerated in a suitable combustion chamber. Disposal must comply with all Federal, State and Local regulations. Of the methods of disposal currently available, it is recommended that an alternative be selected according to the following order of preference, based upon environmental acceptability: 1) Recycle or rework if at all feasible; 2) Incinerate at an authorized facility; 3) Treat at an acceptable waste treatment facility. If this product has fully polymerized into a solid, it can be considered to be inert and therefore can be disposed of as non-hazardous waste. Waste disposal code CH: 1650 70, EU: 08 01 99

Contaminated Packaging: Empty containers should be taken for local recycling recovery or waste disposal. However, emptied containers may contain residue and therefore all labeled hazard precautions must be observed.

Waste Management Information: Do not discharge effluent containing this product into lakes, streams, ponds or estuaries, oceans, or other waters. Do not discharge effluent containing this product to sewer systems. For guidance, contact your State Water Board or Regional Office of the EPA.

14. TRANSPORT INFORMATION

U.S. Department of Transportation (DOT): Not regulated for this mode of transport

International Maritime Dangerous Goods: Not regulated for this mode of transport

International Air Transportation Authority (IATA): Not regulated for this mode of transport

15. REGULATORY INFORMATION

Federal Regulations

OSHA Hazardous Substances: This material is classified as Not Hazardous under OSHA regulations

SARA Section 313: No reportable quantities of Hazardous ingredients are present

International Regulations

Chemical weapons Convention (CWC): This product does not contain any components listed under the Chemical Weapons Convention Schedule of Chemicals

Canadian Domestic Substance List (DSL) Status: All components are listed on the DSL

Europe EINECS: This product complies with the Chemical Substance Inventory requirements.

16. OTHER INFORMATION

Disclaimer: The information contained herein is based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to such data or information. The user is responsible for determining whether the product is suitable for its intended conditions of use. As the user has the responsibility to provide a safe workplace, all aspects of an individual operation should be examined to determine if, or where, precautions (in addition to those described herein) are required. Any health hazard information contained herein should be passed on to employees for their use and safety. It is the user's responsibility to comply with all Federal, State and Local laws.