

SAFETY DATA SHEETS

This SDS packet was issued with item:

071465186

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

071231190 071300086 071334473 071465194 071465202

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

071472299



SAFETY DATA SHEET

Regulation (EC) No 1907/2006 and 2015/830 (REACH), OSHA HAZCOM 2012, Supersedes Date: New SDS
WHMIS 2015

Revision: 10/31/2023

Section 1 Identification of the Substance/Preparation and of the Company/Undertaking.

1.1 Product Identifier

Product Type: 3D Printing Resin

Trade Name: Verimodel O.S.

Veriguide O.S.

Verisplint O.S.

VeriDent Try-In

VeriTray

VeriGum

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Product Use: Resin for production of dental applications.

Uses Advised Against: For professional use only.

1.3 Details of the Supplier of the Substance or Mixture:

Manufacturer

Whip Mix Corporation

361 Farmington Avenue

Louisville, Kentucky, USA 40217

Emergency Telephone Number: (502) 637-1451

Fax Number: (502) 634-4512

EU Importer

Whip Mix Europe GmbH

Hagenerstr. 21

De – 44225 Dortmund

Germany

+49 231 / 567 70 8-0

1.4 Emergency Telephone Number:

Transportation Emergencies: CHEMTREC 1(800) 424-9300 (U.S. and Canada)
International Calls: 1- 703-527-3887 (Collect calls accepted)

Other Product Information: Info@Whipmix.com
www.whipmix.com

Section 2 Hazard Identification

2.1 Classification of the Mixture:

OSHA/WHMIS/GHS/CLP Classification (1272/2008):

Health Hazards	Physical Hazards	Environmental Hazards
Skin Sensitization Category 1A H317 Skin Irritation Category 2 H315 Eye Irritation Category 2A H319 Specific Target Organ Toxicity – Single Exposure Category 3 H335 Toxic to Reproduction Category 2 H361	Not Hazardous	Hazardous to the Aquatic Environment Chronic Category 3 H412

2.2 Label Elements

Warning!



Contains Methacrylate oligomers and monomers, Acrylate oligomers and monomers, and Phosphine Oxide.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H361 Suspected of damaging fertility or the unborn child.
H412 Harmful to aquatic life with long lasting effects.

Precautionary Phrases:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing mists, vapors or spray.
P264 Wash thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing must not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves and eye protection.

P308 + P313 IF exposed or concerned: Get medical attention.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P333 + P361 If skin irritation or rash occurs: Get medical attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 Call a POISON CENTER or doctor if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor.
P337 + P313 If eye irritation persists: Get medical attention.
P391 Collect spillage.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents and container in accordance with local and national regulations.

2.3 Other Hazards: None

Section 3 Composition/Information on Ingredients.

3.2 Mixtures

<u>Substance</u>	<u>CAS No./ EC Number</u>	<u>%</u>	<u>CLP/GHS Classification (1272/2008)</u>
Methacrylate oligomer	Proprietary	<30	Skin Sensitization Category 1 H317
Methacrylate oligomer	Proprietary	<30	Skin Irritation Category 1 H315 Specific Target Organ Toxicity – Single Exposure Category 3 H335
Acrylate Oligomer	Proprietary	<35	Eye Irritation Category 2 H319 Aquatic Chronic Category 3 H412
Methacrylate Monomer	Proprietary	<30	Skin Irritation Category 2 H315 Eye Irritation Category 2 H319
Acrylate Monomer	Proprietary	<50	Skin Sensitization Category 1A H317 Reproductive Toxicity Category 2 H361df
2 Methacrylate Monomer	Proprietary	<30	Eye Irritation Category 2 H319 Specific Target Organ Toxicity – Single Exposure Category 3 H335

Methacrylate Monomer 4	Proprietary	<20	Skin Irritation Category 2 H315 Eye Irritation Category 2 H319
Methacrylate Oligomer 3	Proprietary	<35	Skin Sensitization Category 1 H317
Phosphine Oxide	75980-60-8	<2	Skin Sensitization Category 1 H317 Reproductive Toxicity Category 2 H361df Aquatic Chronic Toxicity Category 2 H411

See Section 16 for full text of GHS.

Section 4 First-Aid Measures.

4.1 Description of First Aid Measures

Inhalation: Remove to fresh air. If irritation persists, get medical attention.

Eyes: Flush eyes with large quantities of water for at least 15 minutes, holding the eyelids apart. Seek immediate medical attention.

Skin: Remove contaminated clothing. Wash skin with soap and water. If irritation or rash develop, get medical attention. Launder clothing before reuse.

Ingestion: If large amounts are swallowed, get medical attention.

4.2 Most Important symptoms and effects, both acute and delayed: Causes eye and skin irritation. May cause respiratory irritation. May cause allergic skin reaction. Suspected of causing reproductive effects based on animal data.

4.3 Indication of any immediate medical attention and special treatment needed: Immediate medical attention is not required.

Section 5 Fire-Fighting Measures.

5.1 Extinguishing Media: Use water spray, alcohol-resistant foam, carbon dioxide or dry chemical. Do not use a steady stream of water.

5.2 Special Hazards Arising from the Substance or Mixture: Not flammable or combustible but may burn under fire conditions.

5.3 Advice for Fire-Fighters: Firefighters should wear full emergency equipment and approved positive pressure self-contained breathing apparatus. Cool fire exposed containers with water.

Section 6 Accidental Release Measures.

6.1 Personal Precautions, Protective Equipment and Emergency Procedures: Wear protective clothing and equipment as described in Section 8. Wash thoroughly after handling.

6.2 Environmental Precautions: Report releases as required by local and national authorities. Avoid release to the environment.

6.3 Methods and Material for Containment and Cleaning Up: Contain and collect with an inert absorbent. Place into a container for disposal. For small spill, wipe up with a paper towel.

6.4 Reference to Other Sections: Refer to Section 8 for personal protective equipment and Section 13 for disposal information.

Section 7 Handling and Storage.

7.1 Precautions for Safe Handling: Avoid contact with eyes, skin and clothing. Avoid breathing mists or spray. Use with adequate ventilation. Wash exposed skin thoroughly with soap and water after handling.

7.2 Conditions for Safe Storage, Including any Incompatibilities: Store in a cool, dry, well-ventilated location. Protect from heat and direct sunlight.

7.3 Specific end use(s):

Industrial uses: None identified

Professional uses: Resin for the production of dental applications.

Section 8 Exposure Controls/Personal Protection

8.1 Control Parameters:

Methacrylate oligomer 1	None Established
Methacrylate oligomer 2	None Established
Acrylate Oligomer	None Established
Methacrylate Monomer 1	None Established
Acrylate Monomer	None Established
Methacrylate Monomer 2	None Established
Methacrylate Monomer 4	None Established
Methacrylate Oligomer 3	None Established
Phosphine Oxide	None Established

8.2 Exposure Controls:

Recommended Monitoring Procedures: Contact an occupational hygiene professional for monitoring.

Appropriate engineering controls: Use with adequate general or local exhaust ventilation to minimize exposures.

Personal Protective Measures– Refer to EU Reg 2016/425

Respiratory protection: None required under normal conditions of use. If exposures are excessive, or irritation is experienced an approved dust/mist respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with applicable regulations and good industrial hygiene practice. In Europe follow EN 149.

Skin protection: Wear impervious gloves to avoid skin contact. In Europe follow EN 374.

Eye/Face protection: Wear safety goggles if contact is possible. In Europe follow EN 166.

Other: Protective clothing as required to avoid skin contact. In Europe follow EN 13034. An eye wash should be available in the work area.

Section 9 Physical and Chemical Properties.

9.1 Information on basic Physical and Chemical Properties

Appearance: Clear or white or colored liquid

Physical State: Liquid

Odor: Characteristic odor

Odor threshold: No data available

Melting point/freezing point: No data available

Flash point: No data available

Flammability (solid, liquid, gas): No data available

Flammable limits: LEL: No data available

Vapor pressure: No data available

Relative density: No data available

Partition coefficient: n-octanol/water: Not applicable

Decomposition temperature: No data available

Explosive Properties: Not applicable

Particle Characteristics: Not applicable

pH: No data available

Boiling point: No data available

Evaporation rate: No data available

UEL: No data available

Relative Vapor density (air = 1): No data available

Solubility In Water: Insoluble

Auto-ignition temperature: No data available

Viscosity: No data available

Oxidizing Properties: Not applicable

9.2 Other Information: None available

Section 10 Stability and Reactivity.

10.1 Reactivity: None known if used in accordance with package instructions.

10.2 Chemical stability: Stable.

10.3 Possibility of hazardous reactions: Product will polymerize in contact with heat or light.

10.4 Conditions to avoid: Avoid unintended contact with light and heat.

10.5 Incompatible materials: Avoid peroxides and free radical compounds, peroxides, strong oxidizing agents and strong alkalis.

10.6 Hazardous decomposition products: Thermal decomposition may generate oxides of carbon and nitrogen.

Section 11 Toxicological Information.

11.1 Information on Toxicological Effects:

Potential Health Effects:

Eyes: Causes irritation with redness, tearing and swelling.

Skin: Causes skin irritation with redness and itching. May cause allergic skin reaction.

Ingestion: Large amounts may cause gastrointestinal irritation and nausea.

Inhalation: Inhalation of mists may cause irritation of the eyes, nose and upper respiratory tract. Symptoms include coughing, sneezing and difficulty in breathing.

Chronic Health Effects: Contain a component that is suspected of damaging fertility.

Acute Toxicity: Based on available data, the classification criteria are not met.

Methacrylate Oligomer 1: Oral rat LD50 5050 mg/kg; Dermal rabbit LD50 >3000 mg/kg

Methacrylate Oligomer 2: Oral rat LD50 2400 mg/kg; Dermal rabbit LD50 <3000 mg/kg

Acrylate Oligomer: Oral rat LD50 >2000 mg/kg; Dermal rabbit LD50 >2000 mg/kg; Inhalation rat LC50 >5 mg/L/4 hr (Dust/Mist)

Methacrylate Monomer 1: Oral rat LD50 >2000 mg/kg

Acrylate Monomer: Oral rat LD50 4660 µL/kg; Dermal rabbit LD50 2540 µL/kg

Methacrylate Monomer 4: Dermal rabbit LD50 >3000 mg/kg

Phosphine Oxide: Oral rat LD50 >2000 mg/kg, Dermal rat LD50 >2000 mg/kg

Skin corrosion/irritation: Methacrylate Oligomer 2, Methacrylate Monomer 1, Methacrylate Monomer 2, and Methacrylate Monomer 4 are skin irritants.

Eye damage/ irritation: Methacrylate Oligomer 2, Acrylate Oligomer, Methacrylate Monomer 1, Methacrylate Monomer 2, and Methacrylate Monomer 4 are eye irritants.

Respiratory Sensitization: Based on available data, the classification criteria are not met.

Skin Sensitization: Methacrylate Oligomer 1, Acrylate Monomer, Methacrylate Oligomer 3, and Phosphine Oxide are skin sensitizers.

Germ Cell Mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met. None of the other components >0.1% are listed by OSHA, IARC, NTP or the EU CLP.

Reproductive Toxicity: Acrylate Monomer and Phosphine oxide are suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity:

Single Exposure: Based on available data, the classification criteria are not met.

Repeat Exposure: Based on available data, the classification criteria are not met.

Aspiration Toxicity: Based on available data, the classification criteria are not met.

11.2 Information on Other Hazards

11.2.1 **Endocrine Disrupting Properties:** None known

11.2.2 **Other Information:** None

Section 12. Ecological Data.

12.1 Ecotoxicity: Harmful to aquatic life with long lasting effects

Methacrylate Oligomer 1: 96 hr LC50 Pimephales promelas 27 mg/L; 48 hr EC50 daphnia magna >380 mg/L

Methacrylate Oligomer 2: 96 hr LC50 Danio rerio 1.8 mg/L; 48 hr EC50 daphnia magna 1.1 mg/L

Acrylate Oligomer: 96 hr LC50 Brachydanio rerio 100 mg/L; 48 hr LC50 daphnia magna No toxicity; 72 hr IC50 Scenedesmus subspicatus 537 mg/L

Methacrylate Monomer 4: 96 hr LC50 fish 119.44 mg/L

Phosphine Oxide: 48 hr LC50 Oryzias latipes 6.53 mg/L, 48 hr EC50 daphnia magna 3.53 mg/L, EC10

Pseudokirchneriella subcapitata 1.56 mg/L

12.2 Persistence and degradability: Acrylate oligomer is not readily biodegradable (9% in 28 days).

12.3 Bioaccumulative potential: No data available

12.4 Mobility in soil: No data available.

12.5 Results of PBT and vPvB assessment: Components do not meet the criteria of PBT or vPvB.

12.6 Endocrine Disrupting Properties: None known

12.7 Other adverse effects: Not required.

Section 13. Disposal Considerations.

13.1 Waste Treatment Methods: Dispose in accordance with all national and local regulations.

Section 14. Transport Information.

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Hazard Class(s)	14.4 Packing Group	14.5 Environmental Hazards
US DOT		Not Regulated			
Canadian TDG		Not Regulated			
EU ADR/RID		Not Regulated			
IMDG		Not Regulated			
IATA/ICAO		Not Regulated			

14.6 Special precautions for User: Not applicable

14.7 Transport in Bulk According to IMO Instruments: Not applicable – product is transported only in packaged form.

Section 15 Regulatory Information.

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

US Regulations

SARA Section 313 (40 CFR 372): This product contains the following toxic chemical(s) subject to reporting requirements of SARA 313: None

SARA Section 311/312 (40 CFR 370) Hazard Categories: Refer to Section 2 for OSHA Hazard Classification.

Comprehensive Environmental Response and Liability Act of 1980 (CERCLA): This product is not subject to CERCLA reporting requirements as it is sold. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

California: This product is not known to contain any chemicals listed by the State of California as causing cancer and/or reproductive harm.

Chemical Inventories

Toxic Substances Control Act (TSCA): All of the components of this product are listed on the TSCA inventory

Canadian Environmental Protection Act: All of the components of this product are listed on the Domestic Substances List (DSL).

Other EU Regulations: This product is classified and labeled in accordance with EC CLP. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006 and 2015/830 (REACH.)

German Water Hazard Class (VwVwS): 2

16. Other Information.

- HMIS Rating: Health 2* Flammability 1 Physical Hazard 0
Hazard: 4-Severe; 3-Serious; 2-Moderate; 1-Slight; 0-Minimum

Date Revised: October 31, 2023

SDS Revision History: New SDS

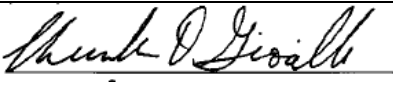
Supersedes Date: New SDS

CLP/GHS Classification and H Phrases for Reference (See Section 3)

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H361df Suspected of damaging fertility or the unborn child.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Literature references and sources for data: ECHA database, GESTIS, eChemPortal, TOXNET, Supplier SDS

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 (CLP): Calculation method

Prepared By: 	Translated By:
Date: October 31, 2023	Date: