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ECR# 27964

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

GHS product identifier

Product Name Virtuoso Sealant, Clear and Opaque

Other means of identification

Synonyms None

Product Type Paste

Recommended use of the chemical and restrictions on use

Recommended Use Professional dental bonding agent

Uses advised against No information available

Supplier's details

Supplier Address

DenMat
1017 W. Central
Ave. Lompoc, CA
93436
TEL: 805-346-3700

Emergency telephone number

805-346-3700

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

Skin Sensitizer	Category 1B
Skin Corrosion/Irritation	Category 2

GHS Label elements, including precautionary statements

Emergency Overview

Signal Word : Warning

Hazard Statements

Hazard Statements

- H315 - Causes skin irritation
- H317 - May cause an allergic skin reaction
- H319 - Causes serious eye irritation

Precautionary Statements

- H315 - Causes skin irritation
- H317 - May cause an allergic skin reaction
- H319 - Causes serious eye irritation
- P261 - Avoid breathing vapors.
- P264 - Wash hands and forearms thoroughly after handling.
- P272 - Contaminated work clothing should not be allowed out of the workplace.
- P280 - Wear eye protection, protective gloves.
- P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
- P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
- P337+P313 - If eye irritation persists: Get medical advice/attention.
- P362 - Take off contaminated clothing and wash before reuse.
- P501 - Dispose of contents/container according to local, regional, national, and international regulations.



Appearance Clear/pale yellow

Physical State Paste

Odor slight ester/sweet smell

Prevention

- Wash face, hands and any exposed skin thoroughly after handling.
- Avoid breathing dust/fume/gas/mist/vapors/spray.
- Use only outdoors or in a well-ventilated area.
- Keep container tightly closed.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Keep cool

General Advice

None

Eyes

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- IF eye irritation persists: Get medical advice/attention

Skin

- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Virtuoso Sealant, Clear/Opaque

Inhalation

- If INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Call a POISON CENTER or doctor/physician if you feel unwell

Fire

- In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

- Store locked up.

Disposal

- Dispose of contents/container to an approved waste disposal plant.

Hazard Not Otherwise Classified (HNOC)

Not applicable

Other information

Aspiration hazard if swallowed - can enter lungs and cause damage Harmful to aquatic life

<5% of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade secret
ethoxylated bisphenol-a-dimethacrylate	56744-60-6	35 – 45	*
triethylene glycol dimethacrylate	109-16-0	1 – 5	*
urethane dimethacrylate	72869-86-4	20 – 30	*
2-hydroxyethyl methacrylate	868-77-9	1 - 5	*

**The exact percentage (concentration) of composition has been withheld as a trade secret.*

4. FIRST AID MEASURES

Description of necessary first-aid measures

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician.
Skin Contact	Wash off with warm water and soap. Consult a physician if necessary.
Inhalation	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. If feeling unwell, seek medical attention.
Ingestion	Rinse oral cavity with copious water. If feeling unwell, call a physician or Poison Control Center immediately.

Most important symptoms/effects, acute and delayed

Most Important Symptoms/Effects Mild skin irritation

Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician Not Applicable

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None

Specific Hazards Arising from the Chemical

None

Explosion Data

Sensitivity to Mechanical Impact

None.

Sensitivity to Static Discharge

None.

Protective Equipment and Precautions for Firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight from a protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions

Ensure adequate ventilation. Avoid breathing vapors or mists.
Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling.

Environmental Precautions

Avoid release to the environment. Dispose of contents/container to an approved waste disposal plant. See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Methods for Containment

Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up

Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling

Ensure adequate ventilation. Avoid breathing vapors. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use.

Conditions for safe storage, including any incompatibilities

Storage

Keep containers tightly closed in a dry, cool and away from direct sunlight.

Incompatible Products

Strong acids. Strong oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Occupational Exposure Limits

None Established

Virtuoso Sealant, Clear/Opaque
Appropriate engineering controls

Engineering Measures Showers
 Eyewash stations
 Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses with side-shields. Tightly fitting safety goggles.
Skin and Body Protection Long sleeved clothing. Impervious gloves.
Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid (paste)	Appearance	Various colors
Odor	Minimal; Ester/sweet	Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks/ - Method</u>
pH	Not Applicable	
Melting Point/Range Boiling	Not Applicable	
Boiling Point	227° C	
Evaporation rate	Not Applicable	
Flammability (solid, gas)	Not Applicable	
Flammability Limits in Air		
upper flammability limit	No data available	
lower flammability limit	No data available	
Vapor Pressure	No data available	None known
Vapor Density	Not Applicable	None known
Specific Gravity	1.07 – 1.08 @ 25°C	
Water Solubility	Insoluble	None known
Solubility in other solvents	Partially soluble in acetone and ethanol	None known

Information on basic physical and chemical properties

Partition coefficient: n-octanol/water	No data available	None known
Autoignition Temperature	No data available	None known
Decomposition Temperature	No data available	None known

Viscosity High viscosity

Flammable Properties Not flammable

Explosive Properties No data available
Oxidizing Properties No data available

Other information

VOC Content (%) None

10. STABILITY AND REACTIVITY

Reactivity

No dangerous reaction known under conditions of normal use.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal conditions.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Ignitions sources - heat, sparks and open flames.

Incompatible materials

Strong acids. Strong oxidizing agents.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation

The product itself has not been tested. Data is for major component in product.

May cause drowsiness and dizziness based on components. May cause irritation of respiratory tract.

Eye Contact

Irritating to eyes.

Skin Contact

May cause skin irritation and/or dermatitis.

Ingestion

Potential for aspiration if swallowed. Vomiting may aspirate into lungs and cause chemical pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms

May cause drowsiness and dizziness. Eye contact with liquid may cause irritation including stinging, burning, tearing, or reddening of the eyes.

Delayed and immediate effects and also chronic effects from short and long term exposure

Sensitization

No information available.

Mutagenic Effects

No information available.

Carcinogenicity

No information Available.

Acute Toxicity

Chemical Name	Result	Species	Dose
ethoxylated bis-phenol-A	LD 50 Oral	Rat	>2000 mg/kg
urethane dimethacrylate	LD 50 Oral	Rat	>5000 mg/kg
2-hydroxyethyl methacrylate	LD 50 Oral	Rat	5,564 mg/kg
triethylene glycol dimethacrylate	LD 50 Oral	Rat	10837 mg/kg

Reproductive Toxicity

No information available.

STOT - single exposure

No information available.

STOT - repeated exposure

No information available.

Target Organ Effects

Respiratory system.

Aspiration Hazard

Based on product level data, this product does not meet the requirement to be classified as

an aspiration hazard. However, this product contains an ingredient that may cause aspiration if swallowed.

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
ethoxylated bis-phenol-A dimethacrylate 41637-38-1	EC50 48h >100 mg/l OECD Guideline 201	LD50 96h >100 mg/l OECD Guideline 203	EC50 48h >100 mg/l OECD Guideline 202
urethane dimethacrylate 934705-15-4	EC50 72 h 0.68mg/l	Not Established	EC50 24 h 1.2 mg/l
2-hydroxyethyl methacrylate 868-77-9		Flow Through (Fathead Minnow) 227 mg/l - 96 h	
Triethylene glycol dimethacrylate 109-16-0	Not established	Not established	Not established

Persistence and Degradability No information available.

Bioaccumulation No information available.

Other Adverse Effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging

Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT

UN-Number Not Regulated

15. REGULATORY INFORMATION

International Inventories

TSCA

All components of this product are either listed or are exempt on the TSCA inventory.

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

Virtuoso Sealant, Clear/Opaque

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65



U.S. State Right-to-Know Regulations

Massachusetts	None of the components are listed
New York	None of the components are listed
New Jersey	2-Hydroxyethyl methacrylate
Pennsylvania	2-Hydroxyethyl methacrylate

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazard 1	Flammability 1	Instability 0	Physical and Chemical Hazards -
<u>HMIS</u>	Health Hazard 1	Flammability 1	Physical Hazard 0	Personal Protection X

