



# SAFETY DATA SHEET

Issuing Date 12-Jun-2015

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ECR# 23601

## 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

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.

### 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 CO<sub>2</sub>, 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

|                     |  |
|---------------------|--|
| <b>Eye Contact</b>  | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician.                        |
| <b>Skin Contact</b> | Wash off with warm water and soap. Consult a physician if necessary.   |
| <b>Inhalation</b>   | IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. If feeling unwell, seek medical attention. |
| <b>Ingestion</b>    | 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

|   |       |
|---|-------|
| <b>Sensitivity to Mechanical Impact</b> | None. |
| <b>Sensitivity to Static Discharge</b>  | 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

**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**

|                                     |  |                          |                          |
|-------------------------------------|--|--------------------------|--------------------------|
| <b>Physical State</b>               | Solid (paste)                            | <b>Appearance</b>        | Various colors           |
| <b>Odor</b>                         | Minimal; Ester/sweet                     | <b>Odor Threshold</b>    | No information available |
| <b>Property</b>                     | <b>Values</b>                            | <b>Remarks/ - Method</b> |                          |
| pH                                  | Not Applicable                           |                          |                          |
| <b>Melting Point/Range Boiling</b>  | Not Applicable                           |                          |                          |
| <b>Boiling Point</b>                | 227° C                                   |                          |                          |
| <b>Evaporation rate</b>             | Not Applicable                           |                          |                          |
| <b>Flammability (solid, gas)</b>    | Not Applicable                           |                          |                          |
| <b>Flammability Limits in Air</b>   |  |                          |                          |
| upper flammability limit            | No data available                        |                          |                          |
| lower flammability limit            | No data available                        |                          |                          |
| <b>Vapor Pressure</b>               | No data available                        | None known               |                          |
| <b>Vapor Density</b>                | Not Applicable                           | None known               |                          |
| <b>Specific Gravity</b>             | 1.07 – 1.08 @ 25°C                       |                          |                          |
| <b>Water Solubility</b>             | Insoluble                                | None known               |                          |
| <b>Solubility in other solvents</b> | Partially soluble in acetone and ethanol | None known               |                          |

**Information on basic physical and chemical properties**

|   |                   |            |
|---|-------------------|------------|
| <b>Partition coefficient: n-octanol/water</b> | No data available | None known |
| <b>Autoignition Temperature</b>               | No data available | None known |
| <b>Decomposition Temperature</b>              | No data available | None known |
| <b>Viscosity</b>                              | 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

|                            |   |
|----------------------------|---|
| <b>Product Information</b> | The product itself has not been tested. Data is for major component in product.                       |
| <b>Inhalation</b>          | May cause drowsiness and dizziness based on components. May cause irritation of respiratory tract.    |
| <b>Eye Contact</b>         | Irritating to eyes.   |
| <b>Skin Contact</b>        | May cause skin irritation and/or dermatitis.  |
| <b>Ingestion</b>           | Potential for aspiration if swallowed. Vomiting may aspirate into lungs and cause chemical pneumonia. |

### Symptoms related to the physical, chemical and toxicological characteristics

|                 |  |
|-----------------|--|
| <b>Symptoms</b> | 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

|                          |                           |
|--------------------------|---------------------------|
| <b>Sensitization</b>     | No information available. |
| <b>Mutagenic Effects</b> | No information available. |
| <b>Carcinogenicity</b>   | 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 |

|                                 |  |
|---------------------------------|--|
| <b>Reproductive Toxicity</b>    | No information available.  |
| <b>STOT - single exposure</b>   | No information available.  |
| <b>STOT - repeated exposure</b> | No information available.  |
| <b>Target Organ Effects</b>     | Respiratory system.  |
| <b>Aspiration Hazard</b>        | 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<br>41637-38-1 | EC50 48h<br>>100 mg/l<br>OECD Guideline 201 | LD50 96h<br>>100 mg/l<br>OECD Guideline 203         | EC50 48h<br>>100 mg/l<br>OECD Guideline 202 |
| urethane dimethacrylate<br>934705-15-4                | EC50 72 h<br>0.68mg/l                       | Not Established                                     | EC50 24 h<br>1.2 mg/l                       |
| 2-hydroxyethyl methacrylate<br>868-77-9               |   | Flow Through<br>(Fathead Minnow)<br>227 mg/l - 96 h |   |

|   |                 |                 |                 |
|---|-----------------|-----------------|-----------------|
| Triethylene glycol dimethacrylate<br>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

**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**

|  |     |
|--|-----|
| <b>Acute Health Hazard</b>               | Yes |
| <b>Chronic Health Hazard</b>             | Yes |
| <b>Fire Hazard</b>                       | No  |
| <b>Sudden Release of Pressure Hazard</b> | No  |
| <b>Reactive Hazard</b>                   | 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**

None of the components are listed

**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**

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

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**General Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**