

Safety Data Sheet
acc. to OSHA HCS

Printing date 09/09/2022

Reviewed on 09/09/2022

1 Identification

- **Product identifier**
- **Trade name:** *Opalustre™*
- **Article number:** SDS 84-001.14, 55403
- **Application of the substance / the mixture** Professional Dental Abrasive Material
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Ultradent Products Inc.
505 W. Ultradent Drive (10200 S)
South Jordan, UT 84095-3942
USA
onlineordersupport@ultradent.com
- **Information department:** Customer Service
- **Emergency telephone number:**
CHEMTREC (NORTH AMERICA) : (800) 424-9300
(INTERNATIONAL) : +(703) 527-3887

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Carcinogenicity 1B H350 May cause cancer.
Toxic to Reproduction 2 H361 Suspected of damaging fertility or the unborn child.



GHS05 Corrosion

Skin Corrosion 1B H314 Causes severe skin burns and eye damage.
Eye Damage 1 H318 Causes serious eye damage.

- **Label elements**
- **GHS label elements** Void
- **Hazard pictograms** GHS05, GHS08
- **Signal word** Danger
- **Health Hazard-determining components of labeling:**
Silicon Carbide
Hydrochloric Acid
- **Hazard statements**
H314 Causes severe skin burns and eye damage.
H350 May cause cancer.
H361 Suspected of damaging fertility or the unborn child.
- **Precautionary statements**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dusts or mists.

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- P264 Wash thoroughly after handling.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.
- P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- 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/doctor.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P321 Specific treatment (see on this label).
- P363 Wash contaminated clothing before reuse.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**· **NFPA ratings (scale 0 - 4)**· **HMIS-ratings (scale 0 - 4)**

HEALTH	3	Health = *3
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**· **Description:** Mixture of the substances listed below with nonhazardous additions.· **Dangerous components:**

409-21-2	Silicon Carbide	>30-<50%
25322-68-3	Polyethylene Glycol	>1-<10%
7647-01-0	Hydrochloric Acid	>1-<10%
	Trade Secret	>1-<10%
	Dimethicone	<1%

· **Additional information:**

The specific chemical identity of composition is being withheld as a trade secret. The specific chemical identity is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of paragraph §1910.1200.

4 First-aid measures

· **Description of first aid measures**· **General information:** Immediately remove any clothing soiled by the product.· **After inhalation:**

This product is a thick paste, therefore inhalation is extremely unlikely.

Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical attention if irritation or coughing persists.

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In case of unconsciousness place patient stably in side position for transportation.

- **After skin contact:**

If skin irritation continues, consult a doctor.

Immediately wash with water and soap and rinse thoroughly.

- **After eye contact:** *Rinse opened eye for several minutes under running water. Then consult a doctor.*

- **After swallowing:** *Drink copious amounts of water and provide fresh air. Immediately call a doctor.*

- **Information for doctor:**

- **Most important symptoms and effects, both acute and delayed**

Inhalation may cause irritation to nose and upper respiratory tract, ulceration, coughing, chest tightness and shortness of breath. Higher concentrations cause tachypnoea, pulmonary oedema and suffocation. Ingestion may cause corrosion of lips, mouth, oesophagus and stomach, dysphagia and vomiting. Pain, eye ulceration, conjunctival irritation, cataracts and glaucoma may occur following eye exposure. Erythema and skin irritation, as well as chemical burns to skin and mucous membranes may arise following skin exposure. Potential sequelae following ingestion of hydrochloric acid include perforation, scarring of the oesophagus or stomach and stricture formation causing dysphagia or gastric outlet obstruction. In some cases, RADS may develop. Respiratory symptoms may take up to 36 hours to develop. Symptoms of burning sensation, cough, wheezing, laryngitis, shortness of breath, spasm, inflammation, edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

- **Indication of any immediate medical attention and special treatment needed**

Provide SDS to Physician. Physician should treat symptomatically.

5 Fire-fighting measures

- **Extinguishing media**

- **Suitable extinguishing agents:**

Carbon dioxide

Alcohol resistant foam

Foam

Water

Use fire fighting measures that suit the environment.

- **Special hazards arising from the substance or mixture**

Carbon Oxides

During heating or in case of fire poisonous gases are produced.

- **Advice for firefighters**

- **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

- **Environmental precautions:** *Do not allow to enter sewers/ surface or ground water.*

- **Methods and material for containment and cleaning up:**

If necessary use trained response staff or contractor.

Evacuate personnel to safe areas.

Send for recovery or disposal in suitable receptacles.

Cover spill with soda ash or calcium carbonate. Mix and add water to form slurry. Wear personal protective equipment. Refer to Section 8

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- Use neutralizing agent.
- Dispose contaminated material as waste according to item 13.
- Ensure adequate ventilation.
- **Reference to other sections**
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
- Follow good hygiene procedures when handling chemicals. Refer to Section 8.
- Follow proper disposal methods. Refer to Section 13.
- Do not eat or drink
- Do not smoke.
- Avoid contact with eyes, skin, and clothing.
- Never use hot water and never add water to the acid. Do not allow contact between hydrochloric acid, metal, and organics.
- Avoid splashes or spray in enclosed areas.
- Thorough dedusting.
- Ensure good ventilation/exhaustion at the workplace.
- Open and handle receptacle with care.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
- Protect from freezing and physical damage.
- Provide ventilation for receptacles.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
- Containers for hydrochloric acid must be made from corrosion resistant materials: glass, polyethylene, polypropylene, polyvinyl chloride, carbon steel lined with rubber or ebonite.
- Store in a cool place.
- See product labelling.
- Keep receptacle tightly sealed.
- **Specific end use(s)** Professional Dental Abrasive Material

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
- The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
- At this time, the remaining constituent has no known exposure limits.

409-21-2 Silicon Carbide

PEL	Long-term value: 15* 5** mg/m ³ fibrous dust: *total dust **respirable fraction
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REL	Long-term value: 10* 5** mg/m ³ *total dust **respirable fraction
TLV	Long-term value: 10* 3** mg/m ³ fibrous dust: 0.1 f/cc.;, nonfibrous: *inh., **resp.
25322-68-3 Polyethylene Glycol	
WEEL	Long-term value: 10 mg/m ³ (H); MW>200
7647-01-0 Hydrochloric Acid	
PEL	Ceiling limit value: 7 mg/m ³ , 5 ppm
REL	Ceiling limit value: 7 mg/m ³ , 5 ppm
TLV	Ceiling limit value: 2 ppm A4
Trade Secret	
TWA	Short-term value: 0.8 mg/m ³

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material is based on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

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· **Body protection:** Full head, face and neck protection

9 Physical and chemical properties

· **Information on basic physical and chemical properties**· **General Information**· **Appearance:**

· Form:	Paste
· Color:	Purple
· Odor:	Not Applicable
· Odor threshold:	Not determined.

· **pH-value at 20 °C:** <1· **Change in condition**

· Melting point/Melting range:	Undetermined.
· Boiling point/Boiling range:	Undetermined

· **Flash point:** Not applicable· **Flammability (solid, gaseous):** Not determined.· **Decomposition temperature:** Not determined.· **Auto igniting:** Product is not selfigniting.· **Danger of explosion:** Product does not present an explosion hazard.· **Explosion limits:**

· Lower:	Not determined.
· Upper:	Not determined.

· **Vapor pressure:** Not applicable.

· Density at 20 °C:	1.561 g/cm ³
· Relative density	Not determined
· Vapor density	Not applicable.
· Evaporation rate	Not applicable.

· **Solubility in / Miscibility with**· **Water:** Insoluble.· **Partition coefficient (n-octanol/water):** Not determined.· **Viscosity:**

· Dynamic:	Not applicable.
· Kinematic:	Not applicable.
· Water:	34.6-34.9 %

· **Other information** No further relevant information available.

10 Stability and reactivity

· **Reactivity** Reacts violently with bases and is corrosive.· **Chemical stability**· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

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- **Possibility of hazardous reactions**
Attacks many metals in the presence of water forming flammable explosive gas (hydrogen). Reacts violently with oxidants forming toxic gas (chlorine).
- **Conditions to avoid** Incompatible materials
- **Incompatible materials:**
 - Bases
 - Amines
 - Alkali metals
 - Metals
 - Permanganates (Potassium Permanganate)
 - Fluorine
 - Metal acetylides
 - Hexalithium disilicide
- **Hazardous decomposition products:**
 - Carbon monoxide and carbon dioxide
 - Hydrogen chloride (HCl)

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

ATE (Acute Toxicity Estimate)

Oral	LD50	13,158-13,889 mg/kg
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25322-68-3 Polyethylene Glycol

Oral	LD50	19,600 mg/kg (Guinea pig)
		17,300 mg/kg (mouse)
		>10,000 mg/kg (rat)
LC50 Fish	LD50	>100 mg/l (Fish)
		>20,000 mg/kg (rabbit)
Dermal	LC50(Daphnia magna)	>10,000 mg/l (Water Flea) (Toxicity to aquatic invertebrates)

7647-01-0 Hydrochloric Acid

Oral	LD50	900 mg/kg (rabbit)
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Trade Secret

Oral	LD50	>15,000 mg/kg (mouse)
		>3,300 mg/kg (rat)
		>10,000 mg/l (Fish) (Toxicity to fish)
Dermal	LD50	>5,000 mg/kg (rabbit)
		>5,000 mg/kg (rabbit)
Inhalative	LC50/4 h	0.139 mg/l (rat)

- **Primary irritant effect:**
 - **on the skin:** Caustic effect on skin and mucous membranes.
 - **on the eye:**
 - Strong caustic effect.
 - Strong irritant with the danger of severe eye injury.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
 - The product shows the following dangers according to internally approved calculation methods for preparations: Corrosive

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Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

· **Carcinogenic categories**· **IARC (International Agency for Research on Cancer)**

409-21-2	Silicon Carbide	2A
7647-01-0	Hydrochloric Acid	3

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

· **Toxicity**· **Aquatic toxicity:**

Trade Secret	
EC50	>1,000 mg/kg (daphnia)

· **Persistence and degradability** No further relevant information available.

· **Behavior in environmental systems:**

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:**

Dispose of contents/container in accordance with international, federal, state, and local regulations.

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

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14 Transport information

<ul style="list-style-type: none"> · UN-Number · DOT, IMDG, IATA 	UN3261
<ul style="list-style-type: none"> · UN proper shipping name · DOT · IMDG, IATA 	Corrosive solid, acidic, organic, n.o.s. (Hydrochloric acid) CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (HYDROCHLORIC ACID)
<ul style="list-style-type: none"> · Transport hazard class(es) · DOT 	<div style="text-align: center;">  <p>CORROSIVE 8</p> </div>
<ul style="list-style-type: none"> · Class · Label 	8 Corrosive substances 8
<ul style="list-style-type: none"> · IMDG, IATA 	<div style="text-align: center;">  <p>CORROSIVE 8</p> </div>
<ul style="list-style-type: none"> · Class · Label 	8 Corrosive substances 8
<ul style="list-style-type: none"> · Packing group · DOT, IMDG, IATA 	II
<ul style="list-style-type: none"> · Environmental hazards: 	Not Applicable.
<ul style="list-style-type: none"> · Special precautions for user · Hazard identification number (Kemler code): · EMS Number: · Segregation groups · Stowage Category · Segregation Code 	Warning: Corrosive substances 80 F-A,S-B (SGG1) Acids B SG36 Stow "separated from" SGG18-alkalis. SG49 Stow "separated from" SGG6-cyanides
<ul style="list-style-type: none"> · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code 	Not Applicable.
<ul style="list-style-type: none"> · Transport/Additional information: · DOT · Quantity limitations 	On passenger aircraft/rail: 15 kg On cargo aircraft only: 50 kg
<ul style="list-style-type: none"> · IMDG · Limited quantities (LQ) · Excepted quantities (EQ) 	1 kg Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g

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· **UN "Model Regulation":** UN 3261 CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (HYDROCHLORIC ACID), 8, II

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
· **Sara**

· **Section 355 (extremely hazardous substances):**

7647-01-0	Hydrochloric Acid
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· **Section 313 (Specific toxic chemical listings):**

7647-01-0	Hydrochloric Acid
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· **TSCA (Toxic Substances Control Act):**

409-21-2	Silicon Carbide	ACTIVE
25322-68-3	Polyethylene Glycol	ACTIVE
7647-01-0	Hydrochloric Acid	ACTIVE

· **Hazardous Air Pollutants**

7647-01-0	Hydrochloric Acid
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· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **ACGIH Carcinogenicity (American Conference of Governmental Industrial Hygienists)**

409-21-2	Silicon Carbide	A2
7647-01-0	Hydrochloric Acid	A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **National regulations:**

· **Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

· **Chemical safety assessment:**

Device is a strong acid and is extremely toxic. It is to be used only as directed with PPE, and only by licensed dental professionals.

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16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** Environmental, Health, and Safety
- **Contact:** Customer Service
- **Date of preparation / last revision** 09/09/2022 / -
- **Abbreviations and acronyms:**
 - IMDG: International Maritime Code for Dangerous Goods
 - DOT: US Department of Transportation
 - IATA: International Air Transport Association
 - EINECS: European Inventory of Existing Commercial Chemical Substances
 - ELINCS: European List of Notified Chemical Substances
 - CAS: Chemical Abstracts Service (division of the American Chemical Society)
 - NFPA: National Fire Protection Association (USA)
 - HMIS: Hazardous Materials Identification System (USA)
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
 - PBT: Persistent, Bioaccumulative and Toxic
 - vPvB: very Persistent and very Bioaccumulative
 - NIOSH: National Institute for Occupational Safety
 - OSHA: Occupational Safety & Health
 - TLV: Threshold Limit Value
 - PEL: Permissible Exposure Limit
 - REL: Recommended Exposure Limit
 - Skin Corrosion 1B: Skin corrosion/irritation – Category 1B
 - Eye Damage 1: Serious eye damage/eye irritation – Category 1
 - Carcinogenicity 1B: Carcinogenicity – Category 1B
 - Toxic to Reproduction 2: Reproductive toxicity – Category 2
- *** Data compared to the previous version altered.**

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