Safety Data Sheet
acc. to OSHA HCS

Printing date 09/22/2021 Reviewed on 09/07/2021

1 Identification

· **Product identifier**

· **Trade name: Opalescence™ Boost (mixed)**

· **Article number:** SDS 199-001.17, 34567, 71087, 15083, 1008067
· **Application of the substance / the mixture** Professional Dental In-Office Tooth Bleaching Gel

· **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**

GHS05 Corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes serious eye damage.

Flam. Liq. 4 H227 Combustible liquid.

· **Label elements**
· **GHS label elements** Void
· **Hazard pictograms** GHS05
· **Signal word** Danger

· **Health Hazard-determining components of labeling:**
Hydrogen Peroxide
Trade Secret
· **Hazard statements**
Combustible liquid.
Causes severe skin burns and eye damage.
· **Precautionary statements**

P210	Keep away from flames and hot surfaces. – No smoking.
P260	Do not breathe dusts or mists.
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.

(Contd. on page 2)

Safety Data Sheet
acc. to OSHA HCS

Trade name: Opalescence™ Boost (mixed)

(Contd. of page 1)

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.
P321 Specific treatment (see on this label).
P363 Wash contaminated clothing before reuse.
P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

Health = 3
Fire = 2
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 3
Fire = 2
Reactivity = 0

3 Composition/information on ingredients

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

· **Dangerous components:**

7722-84-1	Hydrogen Peroxide Ox. Liq. 1, H271; Skin Corr. 1A, H314; Acute Tox. 4, H302; Acute Tox. 4, H332	≥35-<50%
56-81-5	Glycerin Eye Irrit. 2B, H320	>10-≤25%
	Synthetic Amorphous, Pyrogenic Silica	1-10%
7757-79-1	Potassium Nitrate Ox. Sol. 2, H272; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335-H336	≥1-<10%
	Trade Secret Skin Corr. 1A, H314; Acute Tox. 4, H302	≥2-<5%
7681-49-4	Sodium Fluoride Acute Tox. 3, H301; Acute Tox. 2, H310; Skin Irrit. 2, H315; Eye Irrit. 2A, H319	≥1-<10%

4 First-aid measures

· **Description of first aid measures**
· **General information:** Immediately remove any clothing soiled by the product.
· **After inhalation:**
Seek medical treatment in case of complaints.
In case of unconsciousness place patient stably in side position for transportation.

(Contd. on page 3)

Safety Data Sheet
acc. to OSHA HCS

Trade name: Opalescence™ Boost (mixed)

(Contd. of page 2)

· **After skin contact:**
If skin irritation continues, consult a doctor.
Immediately wash with water and soap and rinse thoroughly.
· **After eye contact:**
Seek immediate medical advice.
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** No further relevant information available.
· **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

· **Extinguishing media**
· **Suitable extinguishing agents:** Water spray
· **Special hazards arising from the substance or mixture**
In closed unventilated containers, risk of rupture due to the increased pressure from decomposition. Contact with combustible material may cause fire.
During heating or in case of fire poisonous gases are produced.
· **Advice for firefighters**
Use water spray to cool fire exposed surfaces and protect personnel. Move containers from fire area if there isn't any risk.
· **Protective equipment:**
Wear fully protective suit.
Mouth respiratory protective device.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**
Keep people at a distance and stay on the windward side.
Keep away from ignition sources
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
· **Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
· **Methods and material for containment and cleaning up:**
Hydrogen Peroxide may be decomposed by adding sodium metabisulfite or sodium sulfite after diluting to about 5%.
Stop the flow of material, if this is without risk.
Combustible materials exposed to hydrogen peroxide should be immediately submerged in or rinsed with large amounts of water to ensure that all hydrogen peroxide is removed. Residual hydrogen peroxide that is allowed to dry (upon evaporation hydrogen peroxide can concentrate) on organic materials such as paper, fabrics, cotton, leather, wood or other combustibles can cause the material to ignite and result in fire.
Dilute with plenty water.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
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.

(Contd. on page 4)

Safety Data Sheet
acc. to OSHA HCS

Printing date 09/22/2021 Reviewed on 09/07/2021

Trade name: Opalescence™ Boost (mixed)

(Contd. of page 3)

See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

· **Handling:**
· **Precautions for safe handling**
Safety glasses should be used by the patient and doctor. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EN).
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
· **Information about protection against explosions and fires:**
Combustible materials exposed to hydrogen peroxide should be immediately submerged in or rinsed with large amounts of water to ensure that all hydrogen peroxide is removed. Residual hydrogen peroxide that is allowed to dry (upon evaporation hydrogen peroxide can concentrate) on organic materials such as paper, fabrics, cotton, leather, wood or other combustibles can cause the material to ignite and result in fire.
Keep ignition sources away - Do not smoke.
Keep respiratory protective device available.

· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:**
Suitable material for receptacles and pipes: Stainless steel.
Suitable material for receptacles and pipes: glass.
Suitable material for receptacles and pipes: Aluminium.
Store only in the original receptacle.
Provide ventilation for receptacles.
· **Information about storage in one common storage facility:**
Store away from reducing agents.
Store away from combustible materials.
Store away from metals.
· **Further information about storage conditions:**
Store receptacle in a well ventilated area.
Store in a cool place.
See product labelling.
Keep receptacle tightly sealed.
· **Specific end use(s)** Professional Dental In-Office Tooth Bleaching Gel

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 other constituents have no known exposure limits.

7722-84-1 Hydrogen Peroxide	
PEL	Long-term value: 1.4 mg/m³, 1 ppm
REL	Long-term value: 1.4 mg/m³, 1 ppm
TLV	Long-term value: 1.4 mg/m³, 1 ppm

(Contd. on page 5)

Safety Data Sheet
acc. to OSHA HCS

Trade name: Opalescence™ Boost (mixed)

(Contd. of page 4)

56-81-5 Glycerin	
PEL	Long-term value: 15* 5** mg/m³ mist; *total dust **respirable fraction
TLV	TLV withdrawn-insufficient data human occup. exp.
Synthetic Amorphous, Pyrogenic Silica	
ACGIH	Short-term value: 10* 3 mg/m³
Trade Secret	
REL	Ceiling limit value: 2 mg/m³
TLV	Ceiling limit value: 2 mg/m³

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

· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Do not eat or drink while working.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
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:**
Use chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent)

Tightly sealed goggles

· **Body protection:** Protective work clothing

(Contd. on page 6)

Safety Data Sheet
acc. to OSHA HCS

Printing date 09/22/2021 Reviewed on 09/07/2021

Trade name: Opalescence™ Boost (mixed)

(Contd. of page 5)

9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Gel
Color:	Red
· **Odor:**	Odorless
· **Odor threshold:**	Not determined.
· **pH-value at 20 °C:**	6-8.5
· **Change in condition**	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C
· **Flash point:**	>65 °C
· **Flammability (solid, gaseous):**	Not applicable.
· **Decomposition temperature:**	Not determined.
· **Auto igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Not determined.
· **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
· **Vapor pressure:**	Not determined.
· **Density at 20 °C:**	1.2-1.4 g/cm³
· **Relative density**	Not determined
· **Vapor density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in / Miscibility with**	
Water:	Fully miscible.
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined
· **Solvent content:**	
Organic solvents:	<15 %
Water:	<50 %
VOC content:	0.00 % 0.0 g/l / 0.00 lb/gal
VOC (EC)	0.00 %
Solids content:	<20.0 %
· **Other information**	No further relevant information available.

10 Stability and reactivity

· **Reactivity** No further relevant information available.
· **Chemical stability** Stable under recommended conditions.

(Contd. on page 7)

Safety Data Sheet
acc. to OSHA HCS

Trade name: Opalescence™ Boost (mixed)

(Contd. of page 6)

· **Thermal decomposition / conditions to be avoided:** Decomposes when exposed to heat
· **Possibility of hazardous reactions**
Contact with metals, metallic ions, alkalis, reducing agents and organic matter (such as alcohols or terpenes) may produce self-accelerated thermal decomposition.
Reacts with various metals.
Reacts with organic substances.
· **Conditions to avoid**
pH Variations
UV rays
Contamination
· **Incompatible materials:**
Heavy Metals
Reducing Agents
Combustible Materials
Alkalis
Organic materials
· **Hazardous decomposition products:** Oxygen

11 Toxicological information

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

· **LD/LC50 values that are relevant for classification:**		
ATE (Acute Toxicity Estimate)		
Oral	LD50	874 mg/kg
Dermal	LD50	15,432 mg/kg
Inhalative	LC50/4 h	27.5 mg/l

7722-84-1 Hydrogen Peroxide		
Oral	LC50 Fish	16.4 mg/l (Fish)
56-81-5 Glycerin		
Oral	LD50	7,750 mg/kg (Guinea pig)
		4,100 mg/kg (mouse)
		5,570 mg/kg (rat)
		27,000 mg/kg (rabbit)
	LC50 Fish	>5,000 mg/l (Fish)
Dermal	LD50	>21,900 mg/kg (rat)
		10,000 mg/kg (rabbit)
Synthetic Amorphous, Pyrogenic Silica		
Oral	LD50	>5,000 mg/kg (rat) (Oral Test Method)
	LC50 Fish	>10,000 mg/l (Fish) (Toxicity to fish)
Dermal	LD50	>2,000 mg/kg (rabbit) (Dermal test method)
	LC50(Daphnia magna)	>1,000-10,000 mg/l (daphnia) (Toxicity to aquatic invertebrates)
7757-79-1 Potassium Nitrate		
Oral	LD50	3,015 mg/kg (rat)
		1,901 mg/kg (rabbit)
	LC50 Fish	1,378 mg/l (Fish)

(Contd. on page 8)

Safety Data Sheet
acc. to OSHA HCS

Trade name: Opalescence™ Boost (mixed)

(Contd. of page 7)

Dermal	LD50	>5,000 mg/kg (rat)
	LC50(Daphnia magna)	490 mg/l (daphnia)
Trade Secret		
Oral	LD50	214 mg/kg (rat)
	LC50 Fish	80 mg/l (Fish)
7681-49-4 Sodium Fluoride		
Oral	LD50	52 mg/kg (mouse)
	LC50 Fish (static)	17 mg/l (Fish)
Dermal	LD50	175 mg/kg (rat)

· **Primary irritant effect:**
· **on the skin:** Strong 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
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)**		
7722-84-1	Hydrogen Peroxide	3
7681-49-4	Sodium Fluoride	3
9003-01-4	Polyacrylic 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:**	
7722-84-1 Hydrogen Peroxide	
EC50	1.38 mg/l (Algae)
	2.4 mg/l (daphnia)
56-81-5 Glycerin	
EC50	>10,000 mg/kg (Bacteria)
7681-49-4 Sodium Fluoride	
EC50	272 mg/kg (Algae)
	98 mg/kg (daphnia)
Algae Toxicity (static)	7 mg/l (Algae)

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

(Contd. on page 9)

Safety Data Sheet
acc. to OSHA HCS

Trade name: Opalescence™ Boost (mixed)

(Contd. of page 8)

· **Behavior in environmental systems:**
· **Bioaccumulative potential** May be accumulated in organism
· **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.
· **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:**
Disposal should be in accordance with applicable regional, national and local laws and regulations.

· **Uncleaned packagings:**
· **Recommendation:** Disposal must be made according to official regulations.
· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

· **UN-Number**	
· **DOT, IMDG, IATA**	UN3264
· **UN proper shipping name**	
· **DOT**	Corrosive liquid, acidic, inorganic, n.o.s. (Hydrogen peroxide, stabilized, Glycerin)
· **IMDG, IATA**	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (HYDROGEN PEROXIDE, STABILIZED, Glycerin)
· **Transport hazard class(es)**	
· **DOT**	

· **Class**	8 Corrosive substances
· **Label**	8
· **IMDG, IATA**	

· **Class**	8 Corrosive substances
· **Label**	8

(Contd. on page 10)

Safety Data Sheet
acc. to OSHA HCS

Trade name: Opalescence™ Boost (mixed)

(Contd. of page 9)

· **Packing group**	
· **DOT, IMDG, IATA**	II
· **Environmental hazards:**	Not Applicable.
· **Special precautions for user**	Warning: Corrosive substances
· **Hazard identification number (Kemler code):**	80
· **EMS Number:**	F-A,S-B
· **Segregation groups**	Acids
· **Stowage Category**	B
· **Stowage Code**	SW2 Clear of living quarters.
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not Applicable.
· **Transport/Additional information:**	
· **DOT**	
· **Quantity limitations**	On passenger aircraft/rail: 1 L On cargo aircraft only: 30 L
· **IMDG**	
· **Limited quantities (LQ)**	1L
· **Excepted quantities (EQ)**	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· **UN "Model Regulation":**	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (HYDROGEN PEROXIDE, AQUEOUS SOLUTION, STABILIZED, GLYCERIN), 8, II

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.

· **Sara**

· **Section 355 (extremely hazardous substances):**	
7722-84-1	Hydrogen Peroxide

· **Section 313 (Specific toxic chemical listings):**	
7757-79-1	Potassium Nitrate

· **TSCA (Toxic Substances Control Act):**		
7722-84-1	Hydrogen Peroxide	ACTIVE
56-81-5	Glycerin	ACTIVE
7757-79-1	Potassium Nitrate	ACTIVE
	Trade Secret	ACTIVE
7681-49-4	Sodium Fluoride	ACTIVE

· **Hazardous Air Pollutants**
None of the ingredients is listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**
None of the ingredients is listed.

(Contd. on page 11)

Safety Data Sheet
acc. to OSHA HCS

Trade name: Opalescence™ Boost (mixed)

(Contd. of page 10)

· **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)**

7722-84-1	Hydrogen Peroxide	A3
7681-49-4	Sodium Fluoride	A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**
None of the ingredients is listed.

· **Chemical safety assessment:**
Product contains high levels of hydrogen peroxide, which has a known toxicological profile. Product is only to be used by licensed dental professionals using the specified engineering controls.

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** 09/22/2021 / -
· **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)
VOC: Volatile Organic Compounds (USA, EU)
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
Flam. Liq. 4: Flammable liquids – Category 4
Ox. Liq. 1: Oxidizing liquids – Category 1
Ox. Sol. 2: Oxidizing solids – Category 2
Acute Tox. 3: Acute toxicity – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Acute Tox. 2: Acute toxicity – Category 2
Skin Corr. 1A: Skin corrosion/irritation – Category 1A
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3