

Safety Data Sheet
acc. to OSHA HCS

Printing date 09/22/2021

Reviewed on 02/20/2020

1 Identification

- **Product identifier**
- **Trade name:** *ChlorCid™, ChlorCid™ V, ChlorCid™ Surf*
- **Article number:** *SDS 34-001.11, 69004, 1005564, 66004*
- **Application of the substance / the mixture** *Professional Dental Sodium Hypochlorite Solution*
- **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

Eye Dam. 1 H318 Causes serious eye damage.

GHS07

Skin Irrit. 2 H315 Causes skin irritation.

- **Label elements**
- **GHS label elements** *Void*
- **Hazard pictograms** *GHS05*
- **Signal word** *Danger*
- **Health Hazard-determining components of labeling:**
*Sodium Hydroxide
Sodium Hypochlorite*
- **Hazard statements**
*Causes skin irritation.
Causes serious eye damage.*
- **Precautionary statements**
*P264 Wash thoroughly after handling.
P280 Wear protective gloves / eye protection / face protection.
P302+P352 If on skin: Wash with plenty of 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.
P310 Immediately call a poison center/doctor.
P321 Specific treatment (see on this label).*

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P362+P364 Take off contaminated clothing and wash it before reuse.

P332+P313 If skin irritation occurs: Get medical advice/attention.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 3

Fire = 0

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = *3

Fire = 0

Reactivity = 0

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

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

· **Dangerous components:**

7681-52-9	Sodium Hypochlorite ⚠ Skin Corr. 1B, H314; Eye Dam. 1, H318	≥3-<5%
1310-73-2	Sodium Hydroxide ⚠ Acute Tox. 3, H301; ⚠ Met. Corr. 1, H290; Skin Corr. 1A, H314; Eye Dam. 1, H318; ⚠ Acute Tox. 4, H312	≥3-<5%
9003-01-4	Polyacrylic Acid	1-10%

4 First-aid measures

· **Description of first aid measures**

· **General information:**

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing.

Dispose of contaminated clothing and equipment as bio-hazardous waste.

National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call

1-800-222-1222. Ensure that medical personnel are aware of the material(s)

involved and take precautions to protect themselves. First aider needs to protect himself.

Immediately remove any clothing soiled by the product.

· **After inhalation:**

Supply fresh air.

If breathing is difficult, give oxygen. If not breathing, give artificial respiration.

WARNING! It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Call a doctor immediately.

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.

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- **After eye contact:**
Seek immediate medical advice.
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
Do not induce vomiting without medical advice.
Never give anything by mouth to an unconscious person.
Seek immediate medical advice.
Call a doctor immediately.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**
Causes skin irritation. Causes eye burns. Can burn mouth, throat, and stomach. Irritating to respiratory system. Nausea. Vomiting. May cause methemoglobinemia and cyanosis.
Shallow respiration.
- **Indication of any immediate medical attention and special treatment needed** Treat symptomatically.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
Use fire fighting measures that suit the environment.
Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture**
Contact with combustible or organic materials may cause fire.
Contact with metals may evolve flammable hydrogen gas.
- **Advice for firefighters**
- **Protective equipment:**
Wear fully protective suit.
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
Ensure adequate ventilation
Keep people at a distance and stay on the windward side.
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not allow material to contaminate ground water system. See Section 12 for additional Ecological information.
Prevent entry into basements or confined areas.
Do not flush into surface water or sanitary sewer system.
Do not allow to penetrate the ground/soil.
Should not be released into the environment.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Stop leak if you can do it without risk. Neutralize with Sodium Thiosulfate or Sodium Bisulfite. Dilute with water.
Absorb spill with inert material (e.g. vermiculite, dry sand or earth).
Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Clean contaminated surface thoroughly.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.

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Dispose contaminated material as waste according to item 13.

· **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**

Do not inhale vapor or mist.

Avoid release to the environment

Do not ingest.

Avoid contact with eyes, skin, and clothing.

· **Information about protection against explosions and fires:** No special measures required.

· **Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:**

Keep at temperature not exceeding 35 °C/95 °F. It can be stored at temperatures between 2 and 30 deg. C. Store away from incompatible materials. Store in a segregated and approved area.

Store only in the original receptacle.

Provide ventilation for receptacles.

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:**

Store in a cool place.

Protect from exposure to the light.

See product labelling.

Keep receptacle tightly sealed.

· **Specific end use(s)** Professional Dental Sodium Hypochlorite Solution

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:**

7681-52-9 Sodium Hypochlorite

<i>WEEL</i>	Short-term value: 2 mg/m ³
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1310-73-2 Sodium Hydroxide

<i>PEL</i>	Long-term value: 2 mg/m ³
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<i>REL</i>	Ceiling limit value: 2 mg/m ³
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<i>TLV</i>	Ceiling limit value: 2 mg/m ³
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9003-01-4 Polyacrylic Acid

<i>TWA</i>	Short-term value: 0.05 mg/m ³
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· **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.

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When using do not smoke.
 Observe good industrial hygiene practices.
 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 skin.
 Avoid contact with the eyes and skin.

· **Breathing equipment:**

Vapor respirator
 Be sure to use an approved/certified respirator or equivalent.

· **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:**

Face protection



Tightly sealed goggles

· **Body protection:**

Chemical resistant protective suit.
 Boots

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Fluid
Color:	According to product specification
Odor:	Characteristic
Odor threshold:	Not determined.

pH-value:	11-13
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· **Change in condition**

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

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· Flash point:	Not applicable
· Flammability (solid, gaseous):	Not applicable.
· 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 determined.
· Density:	Not determined
· Relative density	Not determined
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined
· Solvent content:	
Water:	>90 %
VOC content:	0.00 %
	0.0 g/l / 0.00 lb/gal
VOC (EC)	0.00 %
· Other information	No further relevant information available.

10 Stability and reactivity

· **Reactivity**

Decomposition of sodium hypochlorite takes place within a few seconds with the following salts: ammonium acetate, ammonium carbonate; ammonium nitrate, ammonium oxalate and ammonium phosphate.

Primary amines and sodium hypochlorite react to form normal chloroamines, which are explosive.

Chloramine gas may be evolved when ammonia and bleach are mixed.

Mixing sodium hypochlorite with ammonia, acids, detergents or organic matter (e.g urine, feces, etc.) will release chlorine gas.

Chlorination of ethyleneimine with sodium hypochlorite gives the explosive compound 1-chloroethyleneimine.

Evolves flammable hydrogen gas on contact with metals.

It may be a fire risk in contact with organic materials.

Contact with combustible materials (wood, paper, oil, clothing, etc.) may cause fire.

Stable at normal conditions. Unstable in air unless mixed with sodium hydroxide. Slowly decomposes on contact with air. Decomposed by carbon dioxide from air. Decomposed by hot water. Sensitive to light. Exposure to light accelerates decomposition.

· **Chemical stability**

· **Thermal decomposition / conditions to be avoided:** Stable at normal conditions.

· **Possibility of hazardous reactions** Hazardous polymerization does not occur.

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- **Conditions to avoid**

- Heat

- Releases chlorine when heated above 35 °C.

- Light

- Air

- Incompatible materials

- **Incompatible materials:**

Incompatible with ammonium acetate, ammonium carbonate, ammonium nitrate, ammonium oxalate, and ammonium phosphate, primary amines, phenyl acetonitrile, ethyleneimine, methanol, acidified benzyl cyanide, formic acid, urea, nitro compounds, methylcellulose, cellulose, aziridine, and ether

- Acids

- Metals

- Amines

- Combustible Materials

- Organic materials

- Reducing Agents

- Ammonia

- **Hazardous decomposition products:**

- When heated to decomposition it emits toxic fumes.

- Hydrogen chloride gas

- Sodium oxides

- Chlorine

- 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	>3,662-9,577 mg/kg (rat)
Dermal	LD50	>38,028 mg/kg (rabbit)

7681-52-9 Sodium Hypochlorite

Oral	LD50	5,800 mg/kg (mouse)
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1310-73-2 Sodium Hydroxide

Oral	LD50	130-340 mg/kg (rat)
	LC50 Fish	160 mg/l (Fish)
Dermal	LD50	1,350 mg/kg (rabbit)
	Absolute lethal concentration	180 ppm (Fish)

9003-01-4 Polyacrylic Acid

Oral	LC50 Fish	580 mg/l (Fish)
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- **Primary irritant effect:**

- **on the skin:** Irritant to skin and mucous membranes.

- **on the eye:** 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:

Irritant

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· **Carcinogenic categories**

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

9003-01-4	Polyacrylic Acid	3
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· **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:**

1310-73-2 Sodium Hydroxide

EC50 40.38 mg/kg (Water Flea)

9003-01-4 Polyacrylic Acid

EC50 174 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.

· **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.

14 Transport information

· **UN-Number**

· **DOT, IMDG, IATA** UNI719

· **UN proper shipping name**

· **DOT** Caustic alkali liquids, n.o.s. (Sodium hydroxide, Hypochlorite solutions)

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· **IMDG** CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE, HYPOCHLORITE SOLUTION), MARINE POLLUTANT

· **IATA** CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE, HYPOCHLORITE SOLUTION)

· **Transport hazard class(es)**· **DOT**

· **Class** 8 Corrosive substances

· **Label** 8

· **IMDG**

· **Class** 8 Corrosive substances

· **Label** 8

· **IATA**

· **Class** 8 Corrosive substances

· **Label** 8

· **Packing group**· **DOT, IMDG, IATA** II

· **Environmental hazards:** Product contains environmentally hazardous substances: Sodium Hypochlorite

· **Marine pollutant:** Symbol (fish and tree)

· **Special precautions for user** Warning: Corrosive substances

· **Hazard identification number (Kemler code):** 80

· **EMS Number:** F-A,S-B

· **Segregation groups** Alkalis

· **Stowage Category** A

· **Segregation Code** SG22 Stow "away from" ammonium salts
SG35 Stow "separated from" SGG1-acids

· **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not Applicable.

· **Transport/Additional information:**· **DOT**

· **Quantity limitations** On passenger aircraft/rail: 1 L
On cargo aircraft only: 30 L

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· **IMDG**

- **Limited quantities (LQ)**
- **Excepted quantities (EQ)**

IL

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **UN "Model Regulation":**

UN 1719 CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE, HYPOCHLORITE SOLUTION), 8, II, ENVIRONMENTALLY HAZARDOUS

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):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

7681-52-9	Sodium Hypochlorite	ACTIVE
1310-73-2	Sodium Hydroxide	ACTIVE
9003-01-4	Polyacrylic Acid	ACTIVE

· **Hazardous Air Pollutants**

None of the ingredients is listed.

· **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)**

None of the ingredients is listed.

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

None of the ingredients is listed.

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· **Chemical safety assessment:**

This product is composed of dilute sodium hypochlorite, which has a known toxicological profile. The product is only to be used by licensed dental professionals according to its intended use.

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

Met. Corr. 1: Corrosive to metals – Category 1

Acute Tox. 3: Acute toxicity – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1