

1. IDENTIFICATION OF SUBSTANCES / PREPARATION AND COMPANY

Product Name: Schottlander Sodium Hypochlorite
 Product Code: 229-8

Application: The irrigation of root canals during endodontic procedures

Company: Davis Schottlander & Davis Ltd
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Date: 01.06.2015 V3.0

2. HAZARD IDENTIFICATION

GHS Classification:

Health	Environmental	Physical
Skin corrosion – Category 1B-H314	Very toxic to aquatic life – Category 1-H400	Not applicable

GHS Label:

OSHA HCS 2012



DANGER

Hazard Statements

H314: Skin corrosion
 H318: Serious eye damage
 H400: Very toxic to aquatic life

Precautionary Statements

P273: Avoid release to the environment
 P280: Wear protective gloves/eye protection/face protection/protective clothing
 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 POISON CENTRE or doctor/physician.

Refer to Section 15 for full text of EU Classifications and R/S Phrases.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	EINECS	Weight%
Sodium Hypochlorite	7681-52-9	231-668-3	3.0-6.0%

4. FIRST AID MEASURES

Description of first aid measures:

Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

Skin Contact: Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

Inhalation: If breathed in move person into fresh air. If not breathing give artificial respiration. Consult a physician.

Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed:

Symptoms/Injuries: Harmful if swallowed. If over-exposed to solution there will be constant irritation to the eyes, nose, throat and skin. Causes eye and skin burns.

Indication of immediate medical attention and special treatment needed:

Immediately call a Poison Control Centre or doctor/physician.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Use dry powder, water spray, fog, mist, foam, sand or carbon dioxide to extinguish fire.

Fire Fighting Procedures: General: Evacuate all personnel; use full protective equipment for fire-fighting. Use a NIOSH approved, self-contained breathing apparatus when the product is involved in fire. Avoid fire-fighting water to enter into the environment.

Unusual Fire and Explosion Hazards: Not flammable or explosive. Product does not ignite when exposed to open flame.

Combustion Products: May produce hydrogen chloride gas and/or chlorine gas and/or sodium oxides.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear proper personal protective equipment as indicated in Section 8. Wear respiratory protection and avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Follow instructions listed in Section 6.3 to follow clean up procedures.

Environmental Precautions:

Follow all government regulations for waste disposal. Prevent release to the environment if possible. Do not flush waste or product into sewer or drains that may lead to waterways. Prevent further leakage or spillage if safe to do so. Discharge into the environment must be avoided.

Methods and Materials for Containment and Cleaning Up:

Small Spills: Wipe up small amounts with chemical resistant or with an absorbent damp rag which is washed with large amounts of water after each use. After cleaning, flush away traces with water.

Large Spills: Soak up with inert absorbent material that is non-combustible and dispose of hazardous waste. Do not flush with water and keep hazardous waste in a suitable, closed container for later disposal.

7. HANDLING AND STORAGE

Handling:

For intraoral use only by trained and experienced dental professionals. Follow good hygiene practices. Do not smoke, eat or drink while using. Use suitable protective equipment when handling. Wash thoroughly after handling and avoid any chemical contact with eyes, skin and clothing. Keep container tightly closed to avoid inhalation or accidental ingestion. Use with adequate ventilation when necessary.

Storage:

Store in a tightly closed container. The recommended storage temperature is 2-8°C and store away from incompatible substances (e.g. acids). Keep containers upright when not in use.

Shelf life is 24-30 months from date of manufacture provided that it is stored properly.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits/Engineering Controls:

Chemical Name	ACGIH-TLV*	NIOSH-REL*	OSHA – Final PELs*
Sodium Hypochlorite,	0.5ppm**	0.5ppm**	1ppm**

*TLV – **Threshold Limit Value** (should not be exceeded at any time).

REL-Recommended Exposure Limit (should not be exceeded at any time).

PEL-Permissible Exposure Limit (averaged over an 8-hour workshift).

** No exposure limits are established for Sodium Hypochlorite, as Chlorine (Cl₂) are listed instead.

Engineering Controls: General or local exhaust ventilation should be sufficient to control airborne levels. Emergency shower and eyewash should be nearby while handling the product.

Personal Protective Equipment (PPE) Information

Eye Protection: Use proper protection – wear tightly fitted chemical goggles (minimum face shield 8-inch minimum), full face shield or full face respirator at all times when product is handled. Use equipment for eye protection tested and approved under appropriate government standards such as BIOSH (US) or EN 166 (EU). Contact lenses should not be worn, they may contribute to severe eye injury.

Skin Protection: S36/37: Wear suitable protective clothing and gloves. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Clothing Protection: Wear gloves and protective clothing (lab coat, apron, boots and bodysuits). Protective equipment can be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory Protection: None needed under normal conditions of use with adequate ventilation. A NIOSH/MSHA chemical cartridge respirator suitable for chlorine could be worn if PEL, REL or TLV is exceeded. This respirator can also be used if inadequate ventilation is observed. If the respirator is the sole means of protection use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance/Colour:**

Physical state:	Liquid
Appearance:	Clear, yellow solution.
Odour:	Chlorine
Odour Threshold:	Not applicable

Important health, safety and environmental information:

Flashpoint:	Not applicable
Autoignition Temp:	Not applicable
Boiling point:	Approx. 100°C/212°F
Melting Point:	Not determined
Freezing Point:	Not determined
Vapour Pressure:	Not determined
Relative Density:	Not determined
Vapour Density (Air=1):	Not determined
Solubility in Water:	Soluble
Decomposition Temp:	Not determined
Pour Point:	Not applicable
Lower Flammability Limit:	Not applicable
Upper Flammability Limit:	Not applicable
Specific Gravity:	~1.1 at 70°F
Evaporation Rate (Water=1):	Not applicable
Viscosity:	Not determined
Octanol/Water Partition Coefficient:	Not determined
pH:	11.9
Molecular Weight:	74.44

10. STABILITY AND REACTIVITY

Chemical stability: Stable

Hazardous Polymerisation: Will not occur.

Hazardous Decomposition Products: Hydrogen chloride gas and sodium oxides can be formed under fire conditions.

Incompatible Materials: Strong acids, Ammonia, Amines

Conditions to avoid: Direct exposure to sunlight. Incompatible materials. Contact with acids liberates toxic gas. Heat and sources of ignition

11. TOXICOLOGY INFORMATION

Signs and Symptoms of overexposure:

Eye Contact: Causes eye burns.

Skin Contact: May be harmful if absorbed through skin. Causes skin burns.

Inhalation: May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Ingestion: May be harmful if swallowed.

Extra information: Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes and skin. Possible side effects include having spasms, inflammation, oedema of the larynx, oedema of the bronchi, pneumonitis, pulmonary

oedema, burning sensation, cough, wheezing, laryngitis, shortness of breath, headache and nausea.

Additional Toxicity Information:

Target Organ(s): Respiratory system.

Acute/Chronic Effects: If over-exposed to solution there will be constant irritation to eyes, nose and throat.

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

12. ECOLOGICAL INFORMATION

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life.

13. DISPOSAL CONSIDERATIONS

By waste contractor in accordance with local regulations.

14. TRANSPORT INFORMATION

U.S. Department of Transportation (DOT): (N/A = Not applicable)

Proper Shipping Name: Corrosive, Liquid, Basic, Inorganic, N.O.S. (Sodium Hypochlorite Mixture).

Identification (UM) Number: 3266

Hazard Class: 8

Packing Group: III

Marine Pollutant: Not determined

Poison Hazard: No

Other Transportation Information

By SEA (IMDG):

Proper Shipping Name: Corrosive, Liquid, Basic, Inorganic, N.O.S. (Sodium Hypochlorite Mixture).

Identification (UN) Number: 3266

Hazard Class: 8

Packing Group: III **EMS-No:** F-A, S-B

Marine Pollutant: Not determined

By GROUND – Canada (TDG):

Proper Shipping Name: Corrosive, Liquid, Basic, Inorganic, N.O.S. (Sodium Hypochlorite Mixture)

Identification (UN) Number: 3266

Hazard Class: 8

Packing Group: III

SAFETY DATA SHEET

By AIR (IATA):

Proper Shipping Name: Corrosive, Liquid, Basic, Inorganic, N.O.S. (Sodium Hypochlorite Mixture)

Identification (UN) Number: 3266

Hazard Class: 8

Packing Group: III

15. REGULATORY INFORMATION

OSHA Hazard - Corrosive

16. FURTHER INFORMATION

The data given above covers exclusively the safety requirements of the product(s) and is based on our current knowledge and experience. It does not signify any warranty with regards to the products properties. This product is only supplied for specific uses in dentistry and must be used in accordance with the directions for use.