

Material Safety Data Sheet



ECO-SAN

Section 1. Chemical product and company identification

Trade name : ECO-SAN
Product use : Sanitizer.
Supplier : Ecolab Inc. International Division
370 N. Wabasha Street
St. Paul, MN 55102
Code : 910557-09
Date of issue : 19-April-2006

EMERGENCY HEALTH INFORMATION: 1-800-328-0026
Outside United States and Canada CALL 1-651-222-5352 (in USA)

Section 2. Composition, information on ingredients

| <u>Name</u> | <u>CAS number</u> | <u>% by weight</u> |
|---------------------|-------------------|--------------------|
| sodium hypochlorite | 7681-52-9 | 10 |

Section 3. Hazards identification

Physical state : Liquid. (Liquid.)
Emergency overview : DANGER!

CAUSES EYE AND SKIN BURNS.
CAUSES RESPIRATORY TRACT IRRITATION.
HARMFUL IF SWALLOWED.
Do not ingest. Do not get in eyes, on skin or on clothing. Avoid breathing vapor or mist.
Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

Potential acute health effects

Eyes : Corrosive to eyes.
Skin : Corrosive to the skin.
Inhalation : Irritating to respiratory system.
Ingestion : Harmful if swallowed. Causes burns to mouth, throat and stomach.

See toxicological information (section 11)

Section 4. First aid measures

Eye contact : In case of contact, immediately flush eyes with cool running water. Remove contact lenses and continue flushing with plenty of water for at least 15 minutes. Get medical attention immediately.
Skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
Inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Ingestion : Rinse mouth; then drink one or two large glasses of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Section 5. Fire fighting measures

Flash point : > 100°C
Products of combustion : These products are halogenated compounds, hydrogen chloride.
Fire-fighting media and instructions : Use an extinguishing agent suitable for the surrounding fire.

Dike liquid for later disposal.
No specific hazard.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

- Personal precautions** : Ventilate area of leak or spill. Do not touch damaged containers or spilled material unless wearing appropriate protective equipment (Section 8). Stop leak if without risk. Do not allow to enter drains or watercourses.
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Methods for cleaning up** : If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials), scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

Section 7. Handling and storage

- Handling** : Do not ingest. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.
- Storage** : Keep out of the reach of children. Keep container tightly closed. Keep container in a cool, well-ventilated area.
Do not store above 40°C

Section 8. Exposure controls, personal protection

- Engineering controls** : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Provide eyewash and safety shower in area if contact or splash hazard exists.

Personal protection

- Eyes** : Use chemical splash goggles. For continued or severe exposure wear a face shield over the goggles.
- Hands** : Use chemical-resistant, impervious gloves.
- Skin** : Use synthetic apron, other protective equipment as necessary to prevent skin contact.
- Respiratory** : Avoid breathing vapors, spray or mists.

Name

chlorine

Exposure limits

ACGIH TLV (United States, 1/2005).

STEL: 2.9 mg/m³ 15 minute/minutes. Form: All forms

STEL: 1 ppm 15 minute/minutes. Form: All forms

TWA: 1.5 mg/m³ 8 hour(s). Form: All forms

TWA: 0.5 ppm 8 hour(s). Form: All forms

OSHA PEL (United States, 8/1997).

CEIL: 3 mg/m³ Form: All forms

CEIL: 1 ppm Form: All forms

Section 9. Physical and chemical properties

- Physical state** : Liquid. (Liquid.)
- Color** : Yellow. (Light.)
- Odor** : chlorine
- pH** : 12.5 (100%)
- Specific gravity** : 1.16 (Water = 1)

Section 10. Stability and reactivity

- Stability** : The product is stable.
- Reactivity** : Extremely reactive or incompatible with acids.
Slightly reactive to reactive with metals.
Mixing this product with acid or ammonia releases chlorine gas.
- Hazardous decomposition products** : These products are halogenated compounds, hydrogen chloride, chlorine.

Section 11. Toxicological information

Potential acute health effects

- Eyes** : Corrosive to eyes.
Skin : Corrosive to the skin.
Inhalation : Irritating to respiratory system.
Ingestion : Harmful if swallowed. Causes burns to mouth, throat and stomach.
Chronic effects on humans : Contains material which causes damage to the following organs: upper respiratory tract, skin, eye, lens or cornea.

Section 12. Ecological information

Products of degradation : These products are halogenated compounds. Some metallic oxides.

Section 13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Waste classification : Unused product is D002 (Corrosive)

Consult your local or regional authorities.

Section 14. Transport information

| Regulatory information | UN number | Proper shipping name | Class | Packing group | Additional information |
|------------------------|-----------|------------------------|-------|---------------|---|
| DOT Classification | UN1791 | Hypochlorite solutions | 8 | III | Limited quantity Yes. Special provisions IB3, N34, T4, TP2, TP24 |

APPLIES ONLY DURING ROAD TRANSPORT

Any variation of the shipping description based on the packaging is not addressed.

Section 15. Regulatory information

- HCS Classification** : Corrosive material
 Target organ effects
U.S. Federal regulations : SARA 302/304/311/312 extremely hazardous substances: No products were found.
 SARA 302/304 emergency planning and notification: No products were found.
TSCA 8(b) inventory : All materials are listed or exempt.
California Prop. 65 : No products were found.

Section 16. Other information

| | | | |
|--|---------------------|---|---|
| Hazardous Material Information System (U.S.A.) | Health | * | 3 |
| | Fire hazard | | 0 |
| | Reactivity | | 0 |
| | Personal protection | | C |

- Date of issue** : 19-April-2006.
Responsible name : Regulatory Affairs
Date of previous issue : No previous validation.
Notice to reader

The above information is believed to be correct with respect to the formula used to manufacture the product in the country of origin. As data, standards, and regulations change, and conditions of use and handling are beyond our control, **NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.**