

Material Safety Data Sheet



MIKRO CHLOR

Section 1. Chemical product and company identification

Trade name : MIKRO CHLOR
Product use : Sanitiser.
Supplier : Ecolab Co.
5105 Tomken Road
Mississauga ON L4W 2X5
1-800-352-5326
Code : 915645-13
Date of issue : 22-October-2008

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 phosphate (na13(clo)(po4)4)	11084-85-8	60 - 100
sodium chloride	7647-14-5	3 - 7
Sodium hypochlorite	7681-52-9	3.25

Section 3. Hazards identification

Physical state : Solid. [Powder.]
Emergency overview : DANGER!

CAUSES EYE AND SKIN BURNS.
MAY CAUSE RESPIRATORY TRACT IRRITATION.
HARMFUL IF ABSORBED THROUGH SKIN OR IF SWALLOWED.
OXIDISER.
CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE.

Do not get in eyes, on skin or on clothing. Avoid breathing dust. Use only with adequate ventilation. Keep only in the original container. Avoid contact with combustible materials. Avoid all possible sources of ignition (spark or flame). Keep away from heat and direct sunlight. Decomposes on heating. Keep container closed. Wash thoroughly after handling.

Routes of entry : Skin contact, Eye contact, Ingestion

Potential acute health effects

Eyes : Corrosive to eyes.
Skin : Corrosive to the skin.
Inhalation : Moderately irritating to the respiratory system.
Ingestion : No known significant effects or critical hazards.

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. Get medical attention immediately. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Inhalation : If inhaled, remove to fresh air.

Ingestion : Do not induce vomiting. Never give anything by mouth to an unconscious person. If irritation persists, get medical attention.

Section 5. Fire-fighting measures

- Auto-ignition temperature** : Not available.
- Flash point** : > 100°C
- Flammable limits** : Not available.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
phosphorus oxides
halogenated compounds
metal oxide/oxides
- Fire-fighting media and instructions** : Use an extinguishing agent suitable for the surrounding fire.
Use water spray to keep fire-exposed containers cool. Dyke area of fire to prevent runoff.
Contact with combustible material may cause fire. This material increases the risk of fire and may aid combustion.
- 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.

Risk of explosion of the product in the presence of mechanical impact: Not available.

Risk of explosion of the product in the presence of static discharge: Not available.

Section 6. Accidental release measures

- Personal precautions** : Immediately contact emergency personnel. Stop leak if without risk. Eliminate all ignition sources. Use suitable protective equipment. Keep unnecessary personnel away. Do not touch or walk through spilt material.
- Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Methods for cleaning up** : If emergency personnel are unavailable, vacuum or carefully scoop up spilt material and place in an appropriate container for disposal. Avoid creating dusty conditions and prevent wind dispersal.

Section 7. Handling and storage

- Handling** : Do not get in eyes, on skin, or on clothing. Avoid breathing dust. Avoid contact with combustible materials. Keep container closed. Keep only in the original container. Use only with adequate ventilation. Wash thoroughly after handling.
- Storage** : Keep out of reach of children. Keep container in a cool, well-ventilated area. Keep container tightly closed. Separate from reducing agents and combustible materials.
Do not store above the following temperature: 45°C

Section 8. Exposure controls/personal protection

- Engineering measures** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

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** : Wear suitable protective clothing.
- Respiratory** : A respirator is not needed under normal and intended conditions of product use.

Name **Exposure limits**

chlorine

CA Alberta Provincial (Canada, 10/2006).15 min OEL: 2.9 mg/m³ 15 minute(s).

15 min OEL: 1 ppm 15 minute(s).

8 hrs OEL: 1.5 mg/m³ 8 hour(s).

8 hrs OEL: 0.5 ppm 8 hour(s).

CA British Columbia Provincial (Canada, 7/2007).

STEL: 1 ppm 15 minute(s).

TWA: 0.5 ppm 8 hour(s).

CA Ontario Provincial (Canada, 3/2007).

STEV: 1 ppm 15 minute(s).

TWAEV: 0.5 ppm 8 hour(s).

CA Quebec Provincial (Canada, 12/2006).STEV: 2.9 mg/m³ 15 minute(s).

STEV: 1 ppm 15 minute(s).

TWAEV: 1.5 mg/m³ 8 hour(s).

TWAEV: 0.5 ppm 8 hour(s).

ACGIH TLV (United States, 1/2008).STEL: 2.9 mg/m³ 15 minute(s).

STEL: 1 ppm 15 minute(s).

TWA: 1.5 mg/m³ 8 hour(s).

TWA: 0.5 ppm 8 hour(s).

Section 9. Physical and chemical properties

Physical state	: Solid. [Powder.]
Colour	: White.
Odour	: chlorine
pH	: 11.8 [Conc. (% w/w): 1%]
Boiling/condensation point	: Not available.
Melting/freezing point	: Not available.
Vapour pressure	: Not available.
Vapour density	: Not available.
Odour threshold	: Not available.
Evaporation rate	: Not available.
LogK_{ow}	: Not available.

Section 10. Stability and reactivity

Stability	: The product is stable. Decomposes on heating. Under normal conditions of storage and use, hazardous polymerisation will not occur.
Conditions of instability	: Not available.
Reactivity	: Highly reactive or incompatible with the following materials: acids. Slightly reactive or incompatible with the following materials: metals and moisture. Mixing this product with acid or ammonia releases chlorine gas.
Hazardous decomposition products	: Oxygen
Hazardous polymerisation	: Under normal conditions of storage and use, hazardous polymerisation will not occur.

Section 11. Toxicological information**Potential acute health effects**

Eyes	: Corrosive to eyes.
Skin	: Corrosive to the skin.
Inhalation	: Moderately irritating to the respiratory system.
Ingestion	: No known significant effects or critical hazards.

Potential chronic health effects

Carcinogenic effects : No known significant effects or critical hazards.

<u>Ingredient name</u>	<u>ACGIH</u>	<u>IARC</u>	<u>NTP</u>	<u>OSHA</u>
Not applicable.				

Mutagenic effects : No known significant effects or critical hazards.

Teratogenic effects : No known significant effects or critical hazards.

Reproductive effects : No known significant effects or critical hazards.

Sensitization to Product : No known significant effects or critical hazards.

Synergistic products (toxicologically) : Not available.

Toxicity data

Not available.

Target organs : Not available.

Section 12. Ecological information**Ecotoxicity**

<u>Ingredient name</u>	<u>Species</u>	<u>Period</u>
Not available.		

Not available.

Section 13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimised wherever possible. Avoid dispersal of spilt 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.

Consult your local or regional authorities.

Section 14. Transport information

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

UN Classification Not regulated.

See shipping documents for specific transportation information.

Section 15. Regulatory information

WHMIS : Class C: Oxidising material.
Class E: Corrosive material

This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the MSDS contains all the information required by the *Controlled Products Regulations*.

Section 16. Other information

Date of issue : 22-October-2008.
Responsible name : Regulatory Affairs
1-800-352-5326
Date of previous issue : 06-December-2005.

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.