

Section 1. Chemical product and company identification

Product name : ENFORCER NP ENF

Recommended use and restrictions : Intermediate.

Use only for the purpose on the product label.

Product dilution information : Not applicable

Supplier's information : Ecolab Inc. Institutional Division
370 N. Wabasha Street
St. Paul, MN 55102
1-800-352-5326

Code : 908762-01

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

Section 2. Hazards identification

GHS Classification : **Product AS SOLD**
OXIDIZING SOLIDS - Category 1
COMBUSTIBLE DUSTS
SERIOUS EYE DAMAGE/ EYE IRRITATION -
Category 2A
SPECIFIC TARGET ORGAN TOXICITY
(SINGLE EXPOSURE) [Respiratory tract
irritation] - Category 3

GHS label elements

Signal word : Danger

Symbol :



Hazard statements : May cause fire or explosion; strong oxidizer.
May form combustible dust concentrations in air.
Causes serious eye irritation.
May cause respiratory irritation.

Precautionary statements

Prevention : Wear fire resistant clothing. Wear eye or face protection. Keep away from heat. - No smoking. Keep away from clothing, incompatible materials and combustible materials. Take any precaution to avoid mixing with combustibles and other incompatible materials. Use only outdoors or in a well-ventilated area. Avoid breathing dust. Wash hands thoroughly after handling. Mixing this product with acid or ammonia releases chlorine gas.

Product AT USE DILUTION

Product is sold ready to use.

Section 2. Hazards identification

Response	: In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
Storage	: No other specific measures identified.
Disposal	: See section 13 for waste disposal information.
Other hazards	: Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Product AS SOLD

Hazardous ingredients	Concentration Range (%)	CAS number
troclosene sodium, dihydrate	>50	51580-86-0
1-octanesulfonic acid, sodium salt	5 - 20	5324-84-5
Proprietary	1 - 5	NJ 0109087631008
tert-butyl peroxybenzoate	<1.0	614-45-9

Product AT USE DILUTION

Hazardous ingredients	Concentration Range (%)	CAS number
Product is sold ready to use.		

Section 4. First aid measures

	Product AS SOLD	Product AT USE DILUTION
Eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation persists.	Product is sold ready to use.
Skin contact	: No known effect after skin contact. Rinse with water for a few minutes.	
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if you feel unwell.	
Ingestion	: Get medical attention if symptoms occur.	
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.	
Notes to physician	: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.	
See toxicological information (section 11)		

Section 5. Fire-fighting measures

Product AS SOLD

- Suitable fire extinguishing media** : Use dry chemical powder.
- Specific hazards arising from the chemical** : Strongly oxidizing material. May cause fire or explosion. Fine dust clouds may form explosive mixtures with air.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
halogenated compounds
metal oxide/oxides
- Specific fire-fighting methods** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Risk of explosion. If large quantities are involved in a major fire, evacuate the area. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Fight fire from protected location or maximum possible distance.
- 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** : Initiate company's spill response procedures immediately. Keep people out of area. Put on appropriate personal protective equipment (see section 8). Do not touch or walk through spilled material.
- Environmental precautions** : Avoid contact of large amounts of spilled material and runoff with soil and surface waterways.
- Methods for cleaning up** : Collect spillage. Use a water rinse for final clean-up.

Product AT USE DILUTION

Product is sold ready to use.

Section 7. Handling and storage

- Handling** : Avoid contact with eyes, skin and clothing. Keep away from combustible materials. Keep only in original container. Wash thoroughly after handling. Mixing this product with acid or ammonia releases chlorine gas.

- Storage** : Keep out of reach of children. Keep container tightly closed. Keep container in a cool, well-ventilated area. Separate from reducing agents and combustible materials.

Store between the following temperatures: 5 and 50°C

Product AT USE DILUTION

Product is sold ready to use.

Section 8. Exposure controls/personal protection

Control parameters

Ingredient name	Exposure limits
chlorine	ACGIH TLV (United States, 3/2012). STEL: 2.9 mg/m ³ 15 minutes. STEL: 1 ppm 15 minutes. TWA: 1.5 mg/m ³ 8 hours. TWA: 0.5 ppm 8 hours. OSHA PEL (United States, 6/2010). CEIL: 3 mg/m ³ CEIL: 1 ppm NIOSH REL (United States, 6/2009). CEIL: 0.5 ppm 15 minutes. CEIL: 1.45 mg/m ³ 15 minutes.

Appropriate engineering controls : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor 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.

Personal protection

Eye protection : Wear eye protection.

Hand protection : No protective equipment is needed under normal use conditions.

Skin protection : No protective equipment is needed under normal use conditions.

Respiratory protection : A respirator is not needed under normal and intended conditions of product use.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

Product AT USE DILUTION

Product is sold ready to use.

Section 9. Physical and chemical properties

Product AS SOLD

Physical state : Powder

Color : White

Odor : chlorine

pH : 5 to 7 (1%)

Flash point : > 100°C
Product does not support combustion.

Explosion limits : Not available.

Flammability (solid, gas) : Not available.

Melting point : Not available.

Boiling point : Not available.

Evaporation rate (butyl acetate = 1) : Not available.

Vapor pressure : Not available.

Vapor density : Not available.

Relative density : 0.8 to 1 (Water = 1)

Product AT USE DILUTION

Product is sold ready to use.

Section 9. Physical and chemical properties

Solubility	: Soluble in the following materials: hot water. Partially soluble in the following materials: cold water.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Odor threshold	: Not available.
Viscosity	: Kinematic (room temperature): 0 cm ² /s (0 cSt)

Section 10. Stability and reactivity

Product AS SOLD

Stability	: The product is stable.
Possibility of hazardous reactions	: Hazardous reactions or instability may occur under certain conditions of storage or use. Conditions may include the following: contact with combustible materials Reactions may include the following: risk of explosion
Conditions to avoid	: Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.
Materials to avoid	: Highly reactive or incompatible with the following materials: acids. Reactive or incompatible with the following materials: moisture. Slightly reactive or incompatible with the following materials: organic materials and metals. Do not allow water to enter container. Wet material may generate halogenated gas that may pressurize sealed containers. Mixing this product with acid or ammonia releases chlorine gas.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Route of exposure	: Skin contact, Eye contact, Ingestion
Product AS SOLD	
Symptoms	
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Skin contact	: No specific data.
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing Respiratory tract irritation
Ingestion	: No specific data.
Acute toxicity	
Eye contact	: Causes serious eye irritation.

Product AT USE DILUTION

Product is sold ready to use.

Section 11. Toxicological information

Skin contact : No known significant effects or critical hazards.
Inhalation : May cause respiratory irritation.
Ingestion : No known significant effects or critical hazards.

Toxicity data

Product/ingredient name

troclosene sodium, dihydrate	LD50 Dermal	Rat	>5000 mg/kg
	LD50 Oral	Rat	1823 mg/kg
1-octanesulfonic acid, sodium salt	LD50 Oral	Rat	>5000 mg/kg
Disodium 1,2-octane disulfonate	LD50 Dermal	Rabbit	>500 mg/kg
	LD50 Oral	Rat	2175 mg/kg
tert-butyl peroxybenzoate	LC50 Inhalation	Rat	>1 mg/l
	Dusts and mists		
	LD50 Dermal	Rabbit	3817 mg/kg
	LD50 Oral	Rat	>2000 mg/kg

Chronic toxicity

Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.

Section 12. Ecological information

Product AS SOLD

Ecotoxicity : This material is very toxic to aquatic life.

Aquatic and terrestrial toxicity

Product/ingredient name	Result	Species	Exposure
troclosene sodium, dihydrate	Acute EC50 0.196 mg/l	Daphnia	48 hours
1-octanesulfonic acid, sodium salt	Acute EC50 3200 mg/l	Daphnia	48 hours
Disodium 1,2-octane disulfonate	Acute EC50 31 mg/l	Daphnia	48 hours
tert-butyl peroxybenzoate	Acute EC50 0.8 mg/l	Aquatic plants	72 hours

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Product AS SOLD

Disposal methods : Avoid disposal. Attempt to use product completely in accordance with intended use. Disposal should be in accordance with applicable regional, national and local laws and regulations.

RCRA classification : Unused product is D001 (Ignitable)

Product AT USE DILUTION

Product is sold ready to use.

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.

DOT

DOT Classification : Not regulated.

IMO/IMDG

IMO/IMDG Classification : UN3077

IMO/IMDG Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (troclosene sodium, dihydrate). Marine pollutant

Section 14. Transport information

Class 9

Packing group III

For transport in bulk, see shipping documents for specific transportation information.

Product AT USE DILUTION

Not intended for transport.

Section 15. Regulatory information

Product AS SOLD

U.S. Federal regulations

TSCA 8(b) inventory : All components are listed or exempted.

SARA 302/304/311/312 extremely hazardous substances: No listed substance

SARA 302/304 emergency planning and notification: No listed substance

SARA 313

Product name

CAS number

Concentration

Form R - Reporting requirements : No listed substance

California Prop. 65 : WARNING: This product contains a chemical known to the State of California to cause cancer.

Section 16. Other information

Product AS SOLD

Hazardous Material :
Information System (U.S.A.)

Health	3
Flammability	0
Physical hazards	1

National Fire Protection Association (U.S.A.) :



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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.