Safety Data Sheet

According to SS586:2014

Pro-Strength Liquid-Plumr Full Clog Destroyer Clog Remover

Version 1.0

Issue date:10/10/2014

Revision date: 10/10/2014 **SDS Record Number: CSSS-TCO-010-115557**

Section 1 Identification of the substance/mixture and of the company/undertaking

Product identifier:

Identification on the label/Trade name:	Pro-Strength Liquid – Plumr Full Clog Destroyer Clog Remover
Additional identification:	Not available
Identification of the product:	See section 3
Index Number:	Not available
REACH registration No.:	Not available

Relevant identified uses of the substance and uses advised against:

Identified uses:

Use in drains Drain Opener.

Uses advised against:

Not available.

Details of the supplier of the safety data sheet:

Supplier(Manufacturer):	The Clorox Company
Address:	1221 Broadway Oakland, CA 94612 USA
Contact person(E-mail):	-
Telephone:	1-510-271-7000
Fax:	-

Emergency telephone Number:

For Medical Emergencies call: 1-800-446-1014

Transportation Emergencies, call Chemtrec: 1-800-424-9300

Available outside office hours?	YES		NO	X

Section 2 Hazards Identification

Classification of the substance/mixture:

GHS Classification	skin corrosion/irritation	Category 1A
	serious eye damage/eye irritation	Category 1
	Corrosive to metals	Category 1
	hazardous to the aquatic environment-CHRONIC	Category 1

label elements:

Hazard Pictograms:

Signal Word(S): Danger

Hazard Statement: Causes severe skin burns and eye damage.

Causes serious eye damage.

May be corrosive to metals.

Very toxic to aquatic life with long lasting effects.

Precautionary statement:

Keep only in original container.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wash hands thoroughly after handling.

Avoid release to the environment.

Wear protective gloves/protective clothing/eye protection/face protection.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

Wash contaminated clothing before reuse.

Absorb spillage to prevent material damage.

Collect spillage.

Store locked up.

Store in corrosive resistant container with a resistant inner liner.

Dispose of contents/container in according with local regulation.

Other hazards:

Not available.

Section 3 Composition/information on ingredients

Substance/Mixture: Mixture

Ingredient(s):

Chemical Name	Registration No.	CAS No.	EC No.	Concentration
Sodium hypochlorite	N/A	7681-52-9	231-668-3	5-10%
Sodium chloride	N/A	7647-14-5	231-598-3	3-7%
Sodium hydroxide	N/A	1310-73-2	215-185-5	1-5%

Section 4 First aid measures

Description of first aid measures:

In all cases of doubt, or when symptoms persist, seek medical attention.

In case of inhalation:

Move to fresh air. If symptoms persist, call a physician. If breathing has stopped, contact emergency medical services immediately. If not breathing, give artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Administer oxygen if breathing is difficult and you are trained. Delayed pulmonary edema may occur. Get medical

attention immediately if symptoms occur.

In case of skin contact:

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention immediately if symptoms occur.

In case of eyes contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if applicable, and continue flushing. Keep eye wide open while rinsing. Do not rub affected area. Seek immediate medical attention/advice.

In case of ingestion:

Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.

Most important symptoms and effects, both acute and delayed:

Causes severe skin burns and eye damage. Causes serious eye damage.

Indication of any immediate medical attention and special treatment needed:

Treat symptomatically. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.

Section 5 Fire-Fighting measures

Extinguishing media:

Suitable extinguishing media:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media:	Use of water spray when fighting fire may be inefficient.
Special hazards arising from the substance or mixture	The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. In case of fire, the following can be released: carbon oxides.
Special fire fighting methods and special protective actions for fire-fighters:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:	Corrosive material. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Use personal protective equipment. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
For emergency responders:	Wear an appropriate NIOSH/MSHA approved respirator if dust is generated.
Environmental Precautions:	Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not allow material to contaminate ground water system. Prevent product from entering drains.
Methods for Containment and Cleaning up:	Prevent further leakage or spillage if safe to do so. Collect and transfer to properly labeled containers.
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 information on disposal.
Additional information:	Not applicable.

Section 7 Handling and storage

Precautions for safe handling:

Protective measures: Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation at machinery.

Advice on general occupational hygiene: Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

Conditions for safe storage, including any incompatibilities: Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials. Keep away from acids, bases, oxidizing agents, strong oxidizing agents.

Specific end use(s): Not applicable.

Section 8 Exposure Controls/Personal Protection

Control parameters:

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA:

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
US ACGIH Threshold Limit Values (TLV)	sodium hydroxide	sodium hydroxide	Not Available	Not Available	2 mg/m3	TLV® Basis: URT, eye, & skin irr

EMERGENCY LIMITS:

Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3
Singapore	Not Available	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
Sodium hypochlorite	Not Available	Not Available
Sodium chloride	Not Available	Not Available
Sodium hydroxide	250 mg/m3	10 mg/m3

Exposure controls:

Appropriate engineering controls: Exhaust ventilation should be designed to prevent accumulation and recirculation in the workplace and safely remove carbon black from the air.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Face-shield.

Hand protection: Wear general protective gloves, eg. light weight rubber gloves. Elbow length PVC gloves

Body protection: Wear protective gloves/clothing. Long sleeved clothing. Chemical resistant apron.

Respiratory protection: No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Thermal hazards: Wear suitable protective clothing to prevent heat.

Environmental exposure controls: According to local regulations, Federal and official regulations.

Section 9 Physical and chemical properties

Information on basic physical and chemical properties:

Appearance:	Viscous liquid
Colour:	Colorless to yellow
Odour:	Bleach
Odour threshold:	Not available
pH:	13.4
Melting point/range (°C):	Not available
Boiling point/range (°C):	Not available
Flash point (°C):	Not available
Evaporation rate:	Not available
Flammability limit - lower (%):	Not available
Flammability (solid, gas):	Not available
Ignition temperature (°C):	Not available
Upper/lower flammability/explosive limits:	Not available
Vapour pressure (20°C):	Not available
Vapour density:	Not available
Density:	Not available
Bulk density (kg/m^3):	Not available
Water solubility (g/l):	Soluble in water.
n-Octanol/Water (log Po/w):	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity, dynamic (mPa.s):	Not available
Explosive properties:	Not available
Oxidising properties:	Not available
Molecular Formula:	Not available
Molecular Weight:	Not available

Other information:

Fat solubility(solvent– oil to be specified) etc:	Not available
Surface tension:	Not available
Dissociation constant in water(pKa):	Not available
Oxidation-reduction Potential:	Not available
Specific gravity:	Not available

Section 10 Stability and reactivity

Reactivity:	The substance is stable under normal storage and handling conditions.
Chemical stability:	Stable at room temperature in closed containers under normal storage and handling conditions.
Possibility of hazardous reactions:	No dangerous reactions known.
Conditions to avoid:	Incompatible materials.
Incompatible materials:	Acids. Bases. Oxidizing agents. Strong oxidizing agents.
Hazardous decomposition products:	Carbon oxides.

Section 11 Toxicological information

Toxicokinetics, metabolism and distribution:

Non-human toxicological data: Not available

Information on toxicological effects:

Acute toxicity:

Sodium hypochlorite (CAS# 7681-52-9)

LD50(Oral, Rat): 8200 mg/kg

LD50(Dermal, Rabbit): > 10000 mg/kg

LC50(Inhalation, Rat): Not available

Sodium chloride (CAS# 7647-14-5)

LD50(Oral, Rat): 3 g/kg

LD50(Dermal, Rabbit): Not available

LC50(Inhalation, Rat): > 42 g/m3 1 h

Sodium hydroxide (CAS#1310-73-2)

LD50(Oral, Rat): Not available

LD50(Dermal, Rabbit): 1350 mg/kg

LC50(Inhalation, Rat): Not available

Skin corrosion/Irritation: Causes severe skin burns and eye damage.

Serious eye damage/irritation: Causes serious eye damage.

Respiratory or skin sensitization: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

STOT- single exposure: Not classified

STOT-repeated exposure: Not classified

Section 12 Ecological information

Toxicity:

Acute toxicity		Time	Species	Method	Evaluation	Remarks
LC50	N/A	96h	Fish	OECD 203	N/A	N/A
EC50	N/A	48h	Daphnia	OECD 202	N/A	N/A
EC50	N/A	72h	Algae	OECD 201	N/A	N/A

Persistence and degradability: Not available.

Bioaccumulative potential: Not available.

Mobility in soil: Not available.

Results of PBT&vPvB assessment: Not available.

Other adverse effects: Very toxic to aquatic life with long lasting effects.

Section 13 Disposal considerations

Waste treatment methods: The material should be disposed of by incineration in a chemical incinerator in compliance with national and regional requirements.

Product / Packaging disposal: If empty container retains product residues, all label precautions must be observed.

Return for reuse or dispose according to national or local regulations.

Section 14 Transport information

	Land transport(ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number	3266	3266	3266
UN Proper shipping name	Corrosive liquid, basic, inorganic, n.o.s.(contains Sodium hypochlorite, Sodium hydroxide)	Corrosive liquid, basic, inorganic, n.o.s.(contains Sodium hypochlorite, Sodium hydroxide)	Corrosive liquid, basic, inorganic, n.o.s.(contains Sodium hypochlorite, Sodium hydroxide)
Transport hazard Class	8	8	8
Packaging group	I	I	I
Environmental hazards	Yes	Yes	Yes
Special precautions for user	See section 2.2	See section 2.2	See section 2.2
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not regulated	Not regulated	Not regulated

Section 15 Regulation information

Safety, health and environmental regulations/legislation specific for the substance or mixture:

Sodium hypochlorite	"Singapore Permissible Exposure Limits of Toxic Substances","International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs".
Sodium chloride	Not available.
Sodium hydroxide	"Singapore Permissible Exposure Limits of Toxic Substances".

Section 16 Other information

Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Author: Hangzhou CIRS Co., Limited Website:www.cirs-group.com Tel:0571-87206555 Email:info@cirs-group.com