AgroChem

SAFETY DATA SHEET

Chlor-San Pro

Section 1. Chemical Product and Company Information

Product Name	:	Chlor-San Pro
Other means of identification	:	Sodium Hypochlorite 15% by volume or 12.5% by weight
Recommended Use	:	Microbiocide
Restrictions on Use	:	Reserved for industrial and professional use.
Supplier Information	:	AgroChem Inc. 26 Freedom Way Saratoga Springs, NY 12866 (518) 226-4850
Date of issue	:	5/4/2021

EMERGENCY HEALTH INFORMATION : 1 (800) 424-9300
Outside United States and Canada CALL: +1 (703) 741-5500

Section 2. Hazards Identification

GHS Classification

Series Eye Damage/Eye Irritation	:	Category 1
Skin Corrosion/Irritation		Category 1 Subcategory 1B

GHS Label Element

Hazard pictograms :

Signal Word	:	Danger
Hazard Statements	:	Causes severe skin burns and eye damage.

Precautionary Statements

Prevention:

Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection.

Response:

• 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.
• IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
• Wash contaminated clothing before reuse.
• IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
• IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Disposal:

• Dispose of contents/container to an approved waste disposal plant.

Other hazards : None Known

Section 3. Composition / Information on Ingredients

Pure substance/mixture : Mixture
Synonyms : Liquid Chlorine Bleach, Liquid Bleach

Chemical Name	CAS-No.	Concentration (%)	Trade Secret
Sodium hypochlorite	7681-52-9	13.2-14.1	*
Sodium hydroxide	1310-73-2	0.2-0.6	*

**The exact percentage (concentration) of composition has been withheld as a trade secret.*

Section 4. First Aid Measures

Eye Contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Immediate medical attention is required.

Skin Contact : Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Immediate medical attention is required.

Ingestion : Drink plenty of water. Do NOT induce vomiting. Consult a physician if necessary

Inhalation : Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.

Notes to physician : Treat symptomatically.

See toxicological information (Section 11)

Section 5. Fire-Fighting Measures

Suitable extinguishing media: Cool containers with flooding quantities of water until well after fire is out.
Small Fires: CO_2, dry chemical, or water spray.
Large Fires If water is necessary to fight fire, use in flooding quantities.

Unsuitable extinguishing media: CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards during fire fighting: In case of fire, hazardous concentrations of chlorine may be formed.

Special protective equipment 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	:	Ensure adequate ventilation. In case of insufficient ventilation wear suitable respiratory equipment. Avoid contact with skin, eyes, and clothing. Use personal protective equipment.
Environmental precautions		Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system.
Methods containment		Dike to contain spill. Suppress vapors with water spray.
Methods for cleaning up		Absorb spilled material with an absorbent material such as clay, sawdust, or sand. Pick up and transfer to properly labeled containers.

Section 7. Handling and Storage

Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice. Use only in area provided with appropriate exhaust ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Do not take internally. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.
Conditions for safe storage	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep at temperatures below 15-21°C / 60-70°F. Keep away from direct sunlight.
Incompatible products	Iron. Copper. Acids. Ammonium compounds. Organic material. Oxidizing agents.

Section 8. Exposure Controls / Personal Protection

Ingredients with workplace control parameters

Chemical Name	ACHIG TLV	OSHA PEL	NIOSH IDLH
Sodium hydroxide 1310-73-2	Ceiling: 2 mg/m3	TWA: 2 mg/m3 (vacated) Ceiling: 2 mg/m3	IDLH: 10 mg/m3 Ceiling: 2 mg/m3

Engineering measures	:	Showers Eyewash stations Ventilation systems.
Personal protective equipment	:	No special protective equipment required.
Eye protection	:	Chemical splash goggles.
Skin and body protection	:	Neoprene gloves.
Respiratory protection	:	None required under normal usage. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.
Hygiene measures	:	Handle in accordance with good industrial hygiene and safety practice.

Section 9. Physical and Chemical Properties

Appearance	:	Liquid
Color	:	Greenish-Yellow
Odor	:	Chlorine
pH	:	12.0, 100%
Flash point	:	No data available
Odor Threshold	:	No data available
Melting point/freezing point	:	No data available
Initial boiling point and boiling range	:	No data available
Evaporation Rate	:	No data available
Flammability (solid, gas)	:	No data available
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Specific Gravity	:	1.1980 – 1.2100
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Relative density	:	No data available
Water solubility	:	Miscible with water
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Autoignition temperature	:	No data available
Thermal decomposition	:	No data available
Viscosity, kinematic	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available
Molecular weight	:	No data available
VOC	:	No data available

Section 10. Stability and Reactivity

Chemical stability		Stable under recommended storage conditions.
Possibility of hazardous reactions		None under normal processing.
Conditions to avoid		Incompatible products. Keep away from direct sunlight. Excessive heat. Ultraviolet light.
Incompatible materials		Iron. Copper. Acids. Ammonium compounds. Organic material. Oxidizing agents.
Hazardous decomposition products		Chlorine gas.

Section 11. Toxicological Information

Information on likely routes of exposure	:	Ingestion, Inhalation, Eye contact, Skin contact
Potential Health Effects		
Eyes	:	Causes serious eye damage. Corrosive to the eyes and may cause severe damage including blindness.
Skin	:	Corrosive. Causes severe skin burns.
Ingestion	:	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Inhalation	:	May cause irritation of respiratory tract.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Delayed and immediate effects and also chronic effects from short and long term exposure

Sensitization No information available.

Mutagenic Effects No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Sodium hypochlorite		Group 3		

Reproductive Toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration Hazard No information available.

Numerical measures of toxicity - Product

Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document:

LD50 3546 mg/kg: Acute toxicity estimate.

Section 12. Ecological Information

Ecotoxicity

Environmental Effects	:	Very toxic to aquatic life with long lasting effects.
Persistence and Degradability		No information available
Bioaccumulation		No information available
Other Adverse Effects		No information available

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Sodium hypochlorite 7681-52-9	EC50 24 h: = 0.095 mg/L (Skeletonema costatum)	LC50 96 h: 0.03 - 0.19 mg/L semi-static (Oncorhynchus mykiss) LC50 96 h: 0.05 - 0.771 mg/L flow-through (Oncorhynchus mykiss) LC50 96 h: 0.06 - 0.11 mg/L flow-through (Pimephales promelas) LC50 96 h: 0.18 - 0.22 mg/L static (Oncorhynchus mykiss) LC50 96 h: 0.28 - 1 mg/L flow-through (Lepomis macrochirus) LC50 96 h: 0.4 - 0.8 mg/L static (Lepomis macrochirus) LC50 96 h: 4.5 - 7.6 mg/L static (Pimephales promelas)		EC50 48 h: 0.033 - 0.044 mg/L Static (Daphnia magna) EC50 96 h: = 2.1 mg/L (Daphnia magna)
Sodium hydroxide 1310-73-2		LC50 96 h: = 45.4 mg/L static (Oncorhynchus mykiss)		

Section 13. Disposal Considerations

Waste Disposal Methods : Dispose of in accordance with federal, state, and local regulations

Contaminated Packaging : Do not re-use empty containers.

Chemical Name	California Hazardous Waste
Sodium hypochlorite	Toxic Ignitable Reactive
Sodium hydroxide	Toxic Corrosive

Section 14. Transport Information

DOT

UN-Number	UN1791
Proper shipping name	Hypochlorite solutions
Hazard Class	8
Packing Group	III
Reportable Quantity (RQ)	Sodium hypochlorite: RQ kg= 321.99
Description	UN1791, Hypochlorite solutions (Sodium Hypochlorite), 8, III, Marine Pollutant, RQ
Emergency Response Guide Number	154

TDG

UN-Number	UN1791
Proper Shipping Name	Hypochlorite solution
Hazard Class	8
Packaging Group	III
Description	UN1791, Hypochlorite solution, 8, III

ICAO

UN-Number	UN1791
Proper Shipping Name	Hypochlorite solution
Hazard Class	8
Packing Group	III
Description	UN1791, Hypochlorite solution, 8, III

IATA

UN-Number	UN1791
Proper Shipping Name	Hypochlorite solution
Hazard Class	8
Packing Group	III
ERG Code	8L
Description	UN1791, Hypochlorite solution, 8, III

IMDG/IMO

UN-Number	UN1791
Proper Shipping Name	Hypochlorite solution
Hazard Class	8
Packing Group	III
EmS No.	F-A, S-B
Description	UN1791, Hypochlorite solution, 8, III

ADR

UN-Number	UN1791
Proper Shipping Name	Hypochlorite solution
Hazard Class	8
Packing Group	III
Classification Code	C9
Tunnel Restriction Code	(E)
Description	UN1791, Hypochlorite solution, 8, III, (E)
ADR/RID-Labels	8
Proper Shipping Name	Hypochlorite solution
Hazard Class	8
Packing Group	III
Classification Code	C9
Special Provisions	521
Description	UN1791, Hypochlorite solution, 8, III
Limited Quantity	5 l

Section 15. Regulatory Information

International Inventories

TSCA	Complies
DSL	Complies
EINECS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain anychemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium hypochlorite	100 lb			X
Sodium hydroxide	1000 lb			X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the ComprehensiveEnvironmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Sodium hypochlorite	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ
Sodium hydroxide	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

"X" designates that the ingredients are listed on the state right to know list.

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Sodium hypochlorite	X	X	X		
Sodium hydroxide	X	X	X		X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

Section 16. Other Information

NFPA	Health Hazard 3	Flammability 0	Instability 2	Physical and Chemical Hazards -
HMIS	Health Hazard 3	Flammability 0	Physical Hazard 2	Personal Protection X

Issuing date	:	5/4/2021
Version	:	1.0
Prepared by	:	RJD

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.
The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.