SAFETY DATA SHEET

NOTICE: Judgment may be based on indirect test and technical literature. The OSHA Hazard Communication Standard only requires SDS's and special labeling for materials defined as "HAZARDOUS"; see 29 CFR 1910.1200 (c). This document may be about a product which is NOT hazardous but is provided as information for our customers. See references for information.

SECTION 1. IDENTIFICATION

Product Identifier: X-15 Product Identification # (PIF): 00288

Product Use: Industrial Bleach 6-7.5% Emergency Telephone #: 1-800-255-3924 ChemTel Manufactured for: Visual Pollution Technology General Information #: 480-657-9183

P.O. Box 12833 Date Prepared: February 1, 2017 Scottsdale, AZ 85267-2833

SECTION 2. HAZARD(S) IDENTIFICATION

GHS Hazard Codification







Signal Word: DANGER

Olghai Word. DANOER			
Hazard Statement	Category	Code	<u>Hazard Class</u>
May be corrosive to metals	1	H290	Corrosive to Metals
Causes severe skin burns and eye damage	1C	H314	Skin Corrosion
Causes serious eye damage	1	H318	Serious Eye Damage
May cause respiratory irritation	3	H335	STOT: SE, Respiratory Tract Irritation
Toxic to aquatic life	2	H401	Hazardous to the Aquatic Environment, Acute

Precautionary Measures:

Precautionary	Code	<u>Statement</u>
Prevention	P234	Keep only in original container.
	P260	Do not breathe fumes/mists/ vapors/sprays.
	P264	Wash thoroughly after handling.
	P271	Use only outdoors or in a well-ventilated area.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
Response	P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	P303+P361+P353	IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower.
	P363	Wash contaminated clothing before reuse.
	P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P310	Immediately call a POISON CENTER or doctor/physician.
	P321	Specific treatments: See section 4 First Aid Measures.
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy
		to do. Continue rinsing.
	P310	Immediately call a POISON CENTER or doctor/physician.
	P390	Absorb spillage to prevent material damage.
Storage	P403+P233	Store in a well-ventilated place. Keep container tightly closed.
	P404	Store in a closed container.
	P405	Store locked up.
Disposal	P501	Dispose of contents/container in compliance with all Federal, State/Provincial and local laws and
		regulations.

Hazards not otherwise classified: Repeated exposure to skin may cause drying and flaking of the skin (dermatitis).

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredient	Common Name/Synonym	CAS#	Concentration Range %
Sodium Hypochlorite	Bleach	7681-52-9	6 – 7.5

SECTION 4. FIRST AID MEASURES

Eyes: Immediately call a POISON CENTER or doctor/physician. Flush well with water for at least 15 minutes, holding eyelids open. Remove any contact lenses and continue rinsing.

<u>Skin or Hair</u>: Remove immediately all contaminated clothing. Rinse skin with water/shower. Wash with soap and water. If irritation persists, seek medical attention. Launder contaminated clothing before reuse.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel immediately. If breathing is difficult, have a trained person administer oxygen. If respiration stops, have a trained person administer artificial respiration by way of pocket mask equipped with one-way valve or other proper respiratory device – Do NOT use mouth-to-mouth method if victim inhaled material. Call a physician.

Ingestion: Immediately call a POISON CENTER or doctor/physician. DO NOT INDUCE VOMITING. Call a physician immediately. Have victim rinse out mouth. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

FIRE-FIGHTING MEASURES

Flash Point: Not flammable

NFPA 30 Flammability: Not flammable

Extinguishing Media: Use media appropriate for surrounding fire. Use water spray to cool containers.

Specific hazards arising from chemical: Hazardous gases may be formed.

Hazardous combustion products: Hydrogen chloride, phosgene, sodium oxide and hydroxide.

Firefighting protective equipment: Wear a self-contained breathing apparatus with a full-face piece operated in the positive pressure demand mode with acid gas cartridge with appropriate turn-out gear and chemical resistant personal protective equipment.

<u>Sensitivity to static discharge</u>: This product is not sensitive to static discharge.

SECTION 6.

ACCIDENTAL RELEASE MEASURES

<u>Personal Precautions</u>: Use personal protective equipment (Section 8). Keep away from heat/sparks/open flames/hot surfaces – No smoking. Ventilate area. Do not breathe fumes/mists/vapors/sprays. Wash thoroughly after handling.

<u>For Small Spills</u>: Avoid release to the environment. Spilled material may be slippery. Avoid dispersal of material and runoff into soil, waterways, drains and sewers. Neutralize with weak acidic material (citric acid), then absorb spill with vermiculite or other inert material, and then place in a container for chemical waste. Litmus paper may be used to confirm neutralization. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Absorb spillage to prevent material damage. Wash walking surfaces with water to reduce slipping hazard. Dispose of contaminated absorbent material in accordance with local, state and federal regulations.

For Large Spills: Large spills cannot occur due to packaging.

SECTION 7.

HANDLING AND STORAGE

<u>Handling</u>: Use personal protective equipment (Section 8). Use only outdoors or in a well-ventilated area. Do not breathe fumes/mists/vapors/sprays. Do not mix with other chemicals unless label instructs otherwise. Empty containers may contain residue and can be dangerous. Do not eat, drink or smoke in work areas. Wash thoroughly after handling. Avoid release to the environment.

Storage: Keep away from heat, flame, or sunlight. Keep from freezing. Keep only in original container. Keep container tightly closed when not in use. Store locked up. Store in a well-ventilated place. Protect from physical damage. Store away from acids, combustible/reducing materials, ammonia salts, plastics, rubber coatings and metals such as aluminum, zinc, tin and lead.

SECTION 8.

EXPOSURE CONTROLS / PERSONAL PROTECTION

<u>Ingredient</u>	CAS#	OSHA/PEL	ACGIH/TLV	STEL
Sodium Hypochlorite	7681-52-9	1ppm	0.5ppm	3ppm

<u>Engineering Controls</u>: Provide adequate ventilation. Observe occupational exposure limits and keep the risk of exposure to a minimum. Personal protective equipment:

Eye: Safety glasses with side shields or splash proof goggles. Use face shield when handling large amounts.

Skin: Chemical resistant (impervious) gloves. Normal materials handling clothing. Boots. Wear apron when handling large amounts.

Respirator: Use NIOSH approved protection with acid gas cartridge if PEL is exceeded, if vapors are causing irritation or if mists/spays are generated.

Other: Use only in a well-ventilated area. Do not eat, drink or smoke while handling. Wash thoroughly after handling.

SECTION 9.

PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Yellow, clear liquid	Upper/Lower flammability limits	Not determined
Odor	Chlorine	Vapor pressure	12mmHg @ 20°C
Odor threshold	Not determined	Vapor density (Air = 1)	<1
pН	11 – 14	Specific gravity (water = 1.0)	1.098 g/ml
Melting point	Not determined	Solubility	Complete in water
Freezing point	Not determined	Partition coefficient (n-octanol/water)	Not determined
Boiling point	Not determined	Auto-ignition temperature	Not determined
Flash point	Not flammable	Decomposition temperature	Not determined
Evaporation rate (n-butyl	<1	Viscosity	Not determined
acetate=1)		-	
Flammability	Not flammable	VOC by weight	0%

SECTION 10.

STABILITY AND REACTIVITY

Reactivity: This product is a strong oxidant, and reacts violently with combustible and reducing materials. Acid contact will produce toxic chlorine gas.

Chemical stability: Stable under normal, ambient temperature and conditions.

Possibility of hazardous reactions: Hazardous polymerization will not occur.

Conditions to avoid: Heat, flame and sparks. Keep from freezing. Do not mix with other chemicals unless product information instructs to do so.

<u>Incompatible materials</u>: Avoid acids, combustible/reducing materials, ammonia salts, plastics, rubber coatings and metals such as aluminum, zinc, tin and lead. Acid contact will produce toxic chlorine gas.

Hazardous combustion products: Hydrogen chloride, phosgene, sodium oxide and hydroxide.

SECTION 11

TOXICOLOGICAL INFORMATION

Toxicity:

Oral (LD50 Rat): 3000-5000mg/kg Dermal (LD50 Rabbit): >2000mg/kg Inhalation (LC50 Rat): Not determined

Skin corrosion/irritation: Corrosive to skin. Symptoms may include burns, blisters, ulceration and scarring. Prolonged contact causes serious tissue damage.

Serious eye damage/irritation: Corrosive to eyes. Symptoms may include severe irritation, disintegration, scarring and clouding.

Symptoms may persist for several days. Risk of serious damage to eyes if left untreated.

Respiratory or skin sensitization: Not classified. Germ cell mutagenicity: No data available.

Carcinogenicity: NTP/IARC/OSHA Carcinogen: Not classified

Reproductive toxicity: Not available.

STOT-single exposure: May cause respiratory irritation.

STOT-repeated exposure: Not classified.

Aspiration hazard: Not classified.

Ingestion: Corrosive to digestive tract. May cause severe pain, burning, vomiting and diarrhea. Lung aspiration may result in chemical pneumonitis, pulmonary edema, damage to lung tissue, and in extreme cases death.

<u>Likely routes of exposure</u>: Eyes, skin and inhalation

Interactive effects: None known.

SECTION 12.

ECOLOGICAL INFORMATION

Toxicity:

96h LC-50 (fish): 5.8 mg/L

96h EC-50 (invertebrates): Not determined 48h LC-50 (algae): Not determined

Persistence and degradability: Expected to be readily biodegradable.

Bioaccumulative potential: Not determined. Mobility in soil: Soil mobility not determined.

Other adverse effects: Toxic to aquatic life with long-lasting effects – Avoid release to the environment.

DISPOSAL CONSIDERATIONS

Disposal of Wastes: Do not dump into sewers, on the ground or into any waterways. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Toxic to aquatic life - avoid release to the environment. Contaminated Packaging: Since emptied containers retain product residue, follow label warnings even after container is emptied.

Do not cut, drill, grind or weld on or near the container.

RCRA: A waste containing this product may have the RCRA hazardous waste no. D002 (Corrosive) (40 CFR 261.22).

SECTION 14.

TRANSPORT INFORMATION

United States DOT:

UN/ID No.: UN1791

Proper Shipping Name: Hypochlorite Solutions

Hazard Class: 8 Packing Group: III

49 CFR §173.154 (b) (3) (Exemption): This product can ship as "Limited Quantity" in inner packaging not over 1.3

gallons. (Non-Hazardous)

IATA and IMDG:

UN/ID No.: UN1791

Proper Shipping Name: Hypochlorite Solutions

Hazard Class: 8 Packing Group: III

Marine Pollutant (IMDG Code): Listed - Chlorine

Transportation in bulk (IMDG - Annex II of MARPOL 73/78 and IBC Code): Not offered in bulk for transport overseas.

SECTION 15.

REGULATORY INFORMATION

TSCA: All components of this product are on the TSCA inventory or are exempt from TSCA inventory requirements under 40 CFR 720.30.

SARA Section 302: The components of this product are either not regulated or regulated, but present in negligible concentrations. SARA TITLE III Section 311/312:

	Immediate (Acute) Health	Yes	Fire Hazard	No
ſ	Delayed (Chronic) Health	No	Reactive Hazard	Yes

SARA Title 313: This material does not contain any chemical components with known CAS numbers that exceed the De Minimis reporting levels (40 CFR 372).

CERCLA: This product has a reportable quantity of 800 lbs. (Sodium Hypochlorite)

United States Right-To-Know: Sodium Hypochlorite CAS# 7681-52-9 - Illinois, New Jersey and North Dakota.

Proposition 65: This material does not contain any chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

RCRA: A waste containing this product may have the RCRA hazardous waste no. D002 (Corrosive) (40 CFR 261.22).

OTHER INFORMATION

Date Prepared: February 28, 2017, vs. #4 - SDS updated to meet revision #5 GHS requirements.

Hazard Ratings (HMIS): Health 3, Flammability 0, Reactivity 2 (Scale 0 - 4). Personal Protection Rating to be supplied by user based on use conditions.

Carefully read all instructions on label before handling this product.

Keep out of reach of children.

"FOR INDUSTRIAL USE ONLY"

Abbreviation	Full Name/Explanation
ACGIH	American Conference of Government Industrial Hygienists
CAS	Chemical Abstract Service
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CNS	Central Nervous System
CFR	Code of Federal Regulations
DOT	Department of Transportation
EC	Effective Concentration
HMIS	Hazardous Material Information System
IARC	International Agency for Research on Cancer
LC	Lethal Concentration
LD	Lethal Dose
NA	Not Applicable
ND	Not Determined
NE	Not Established
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
RCRA	Resource Conservation Recovery Act
SARA	Superfund Amendments and Reauthorization Act
SE	Single Exposure
STEL	Short-Term Exposure Limit
STOT	Specific Target Organ Toxicity
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
VOC	Volatile Organic Compounds

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Regulatory Standards: DOT TITLE 49, Code of Federal Regulations 172.101: Parts 100 to 177, Revised 10/1/92.

SUPER FUND AMENDMENTS REAUTHORIZATION ACT OF 1986, TITLE III TOXIC SUBSTANCE CONTROL ACT LIST (TSCA)- INGREDIENTS LISTED. REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES NATIONAL TOXICOLOGICAL PROGRAM (NTP) REPORT OF CARCINOGENS INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) MONOGRAPHS, OCCUPATIONAL SAFETY & HEALTH REGULATIONS. CODE OF FED. REGS. FOOD & DRUG, 21 PARTS 170 to 199, Participal 41/104, 1473-412. Revised 4/1/91, 173.310.