Product ACS-CLP-112

Revision Date 07/22/2015

Revision |



Safety Data Sheet

SECTION I: IDENTIFICATION

Product Name ACS-CLP-112
Identifier Uses Closed Loop Treatment.

Supplier Advanced Chemical Service Inc.

3410 La Sierra Ave.#F271 Riverside, CA 92503 Tel: 800-319-9227

Contact Person 800-319-9227 / www.advancedchemicalservice.com

Emergency Telephone 24-HOUR EMERGENCY TELEPHONE: INFOTRAC: 1-800-535-5053

INTERNATIONAL#: 1-352-323-3500

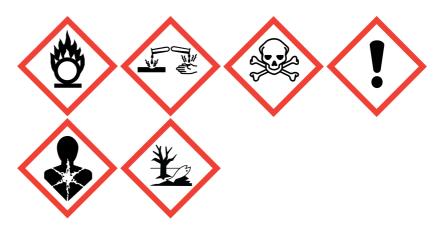
SECTION 2: HAZARDS IDENTIFICATION

Appearance Solid.

Color Granular purple and white.

Odor Odorless.

Pictogram(s)



Signal Word Danger

Hazard Statements H272 May intensify fire; oxidizer.

H301 Toxic if swallowed.

H314 Causes severe skin burns and eye damage

H335 May cause respiratory irritation.

H350 May cause cancer [*].

H361 Suspected of damaging fertility or the unborn child [*].

H400 Very toxic to aquatic life.

Precautionary Statements P210 Keep away from heat/ sparks/open flames/hot surfaces. — No smoking.

 $P260\ Do\ not\ breathe\ dust/fume/\ gas/mist/vapors/spray.$

P261 Avoid breathing dust/fume/ gas/mist/vapors/spray.

P264 Wash hands 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.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated

clothing. Rinse skin with water/shower

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/ attention. P310 Immediately call a POISON CENTER or doctor/physician P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P363 Wash contaminated clothing before reuse.

P391 Collect spillage.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Contains BORIC ACID (HBO2), SODIUM SALT, TETRAHYDRATE SODIUM METABORATE

TETRAHYDRATE sodium

oxido(oxo)borane disodium metasilicate

sodium nitrite phenolphthalein

GHS Classification

Physical and Chemical Hazards

Ox Sol 2- H272,

Human Health

Acute Tox 3 - H301, Skin Corr. IB - H314, Carc. IB - H350, Repr. 2 - H361, STOT SE 3 -

H335

Environment Aquatic Acute 1 - H400

OSHA Regulatory Status This product is Hazardous under the OSHA Hazard communication Standard.

Inhalation Inhalation of vapors or fumes may cause slight to moderate irritation to mucous membranes

and respiratory tract. Symptoms of exposure may include irritation of nose and throat. Avoid

contact.

Ingestion Exposure to product may cause slight moderate irritation to inner linings of mouth,

esophagus and gastrointestinal tract. Symptoms of nitrite poisoning may include intense cyanosis, nausea, dizziness, vomiting, collapse, spasms of abdominal pain, rapid heartbeat, irregular breathing, coma, convulsions or death due to circulatory collapse. Product is

 $considered\,moderately\,toxic.\,Do\,NOT\,ingest.$

Skin contact Exposure to product may cause slight to moderate irritation to skin. Symptoms of exposure

may include redness, itching, swelling or pain. Avoid contact.

Exposure to product may cause severe irritation to eyes, and possibly burns or eye damage.

Symptoms of exposure may include redness, swelling, tearing or pain. Avoid contact.

Routes of Exposure No Information available.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Composition Comments Confidential Business Information has been removed without affecting the overall safety

information on the Safety Data Sheet.

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General Information General first aid, rest, warmth and fresh air.

Inhalation If this product is inhaled and symptoms occur, move the exposed person to fresh air

 $promptly. Seek \, medical \, attention \, if \, symptoms \, persist.$

Ingestion If this product is ingested, drink small amounts of water and monitor superficial effects on

mouth and esophagus. If irritation is noted, seek medical attention promptly. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an

unconscious person.

Skin contact If this product contacts the skin, immediately flush the affected area with soap and water for

at least fifteen (15) minutes. If the product penetrates the clothing, promptly remove the contaminated clothing or shoes, and flush the affected area as described. Seek medical

attention if irritation persists.

Eye contact If this product contacts the eyes, immediately flush eyes with plenty of clean runningwater

for at least fifteen (15) minutes, lifting the upper and lower eyelids occasionally. Remove

contact lenses if worn. Seek medical attention if irritation persists.

Most important symptoms and effects, both acute and delayed

General Information No information available

Inhalation Inhalation of vapors or fumes may cause slight to moderate irritation to mucous membranes

and respiratory tract. Symptoms of exposure may include irritation of nose and throat. Avoid

contact.

Ingestion Exposure to product may cause slight moderate irritation to inner linings of mouth,

esophagus and gastrointestinal tract. Symptoms of nitrite poisoning may include intense

cyanosis, nausea, dizziness, vomiting, collapse, spasms of abdominal pain, rapid heartbeat, irregular breathing, coma, convulsions or death due to circulatory collapse. Product is

 $considered\,moderately\,toxic.\,Do\,NOT\,ingest.$

Skin contact Exposure to product may cause slight to moderate irritation to skin. Symptoms of exposure

may include redness, itching, swelling or pain. Avoid contact.

Exposure to product may cause severe irritation to eyes, and possibly burns or eye damage.

Symptoms of exposure may include redness, swelling, tearing or pain. Avoid contact.

Routes of Exposure No Information available.

Most important symptoms and effects, both acute and delayed

Notes to the Physician Treat Symptomatically.

SECTION 5: FIREFIGHTING MEASURES

Auto Ignition Temperature (°C)
Flammability Limit-Lower (%)
Flammability Limit-Upper (%)
Flash point

No Information available.
No Information available.
No Information available.

Extinguishing Media

Use water, foam, dry chemical or carbon dioxide to extinguish fire.

Hazardous combustion products

 $\label{thm:combustion} \mbox{Hazardous combustion results in the release of oxides of nitrogen, oxides of carbon and}$

possibly toxic phosphines.

Unusual Fire & Explosion Hazards Special Fire Fighting Procedures Protective equipment for fireDried residue can thermally decompose giving off irritating and possibly toxic fumes.

Use water to cool containers exposed to a fire.

Fire fighters should wear full protective equipment, including a self-contained breathing apparatus.

fighters

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions
Environmental Precautions

Use proper personal protection (refer to Section 8). Remove all sources of ignition.

ronmental Precautions Run off from fire control or dilution water may cause pollution. Keep out of drains, municipal

sewers, open bodies of water and water course.

Spill Clean Up Methods

Safely stop source of spill. Clean up spills immediately. Restrict non-essential personnel from the area. Wear protective clothing, goggles and respirator if ventilation is not adequate. Sweep up spilled material and place into container for reuse or disposal. Dispose of waste in accordance with local, state or federal regulations. Use vacuum or wet mop to clean up dust.

Flush spill area with water

SECTION 7: HANDLING AND STORAGE

Handling Use proper personal protection when handling (refer to Section 8). Use under well-ventilated

conditions. Avoid contact with eyes, skin and clothing. Avoid breathing vapors and mists. Avoid prolonged or repeated contact. Do NOT ingest. Wash thoroughly after handling. Rinse

container before disposal.

Usage Description
Storage Precautions

Use only according to directions.

Keep container tightly closed. Do not sore in heat or direct sunlight. Keep in dry, cool, and well ventilated place. The recommended storage temperature is 34°F to 129 °F, preferably at

room temperature 70°F the recommended storage temperature is above 32°F, preferably at

 $room\,temperature\,(70^\circ F).$

Specific End Use(s) The identified uses are in section 1 of this Safety Data Sheet.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Protective Equipment



Ingredient Comments

No occupational exposure limits noted for the ingredients(s).

Process Conditions Keep container tightly sealed when not in use. Provide eyewash, quick drench.

Engineering Measures General mechanical ventilation is recommended for enclosed areas.

generally required. However, if exposure is above the stated limits or ventilation is

inadequate, use a NIOSH approved acid gas/organic vapor respirator to reduce potential for inhalation exposure. When using respirator cartridges, they must be changed frequently to

assure breakthrough exposure does not occur.

Hand Protection Use rubber or plastic gloves to minimize skin contact.

Eye Protection To avoid contact with eyes, use safety glasses or chemical splash goggles. Face shield is

recommended. Eye wash station should be available in the work area.

Hygiene Measures DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before

eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or

moke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Appearance Solid.

Color Granular purple and white.

Odor Odorless.

Odor Threshold -Lower No Information available.

Odor Threshold - Upper No Information available.

pH-Value, Conc. Solution No Information available.

Melting point No Information available.

Initial boiling point and boiling

range

No Information available.

Flash point No Information available.

Evaporation rate No Information available.

Flammability State No Information available.

Flammability Limit-Lower (%) No Information available.

Flammability Limit - Upper (%) No Information available.

Vapor pressure No Information available.

Vapor Density (air=1) No Information available.

Relative density No Information available.

Bulk Density No Information available.

Solubility Completely soluble in water.

Decomposition temperature No Information available.

Partition coefficient; n-octanol/water No Information available.

Auto Ignition Temperature (°C) No Information available.

Viscosity No Information available.

Explosive Properties No information available.

Oxidizing Properties No Information available.

Molecular Weight No Information available.

Volatile Organic Compound No Information available.

SECTION 10: STABILITY AND REACTIVITY

Reactivity Reactions may occur with strong acids, strong reducing agents, ammonia salts, amines,

phthalic acid and cyanides.

Stability This product is stable at ambient temperatures and atmospheric pressures.

Hazardous Polymerization Hazardous polymerization is not expected to occur under normal temperatures and

pressures.

Hazardous Decomposition Products Oxides of nitrogen. May leave a caustic residue.

Conditions to Avoid Avoid contact with strong acids, strong reducing agents, ammonia salts, amines, phthalic

acid and cyanides.

Materials to Avoid Keep away from strong acids, strong reducing agents, ammonia salts, amines, phthalic acid

and cyanides.

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicological Information No Information available.

Acute Toxicity (Oral LD50) >2394.00mg/kg Rat
Acute Toxicity (Dermal LD50) >389.00mg/kg Rabbit
Acute Toxicity (Inhalation LC50) No Information available.

Skin Corrosion/Irritation No Information available.

Respiratory SensitizationNo Information available.Skin SensitizationNo Information available.Reproductive Toxicity:No Information available.

Germ Cell Mutagenicity: Genotoxicity - In Vitro Genotoxicity - In Vivo

Carcinogenicity:

Carcinogenicity No Information available.

NTP - Carcinogenicity phenolphthalein: Reasonably anticipated to be a human carcinogen.

OSHA - Carcinogenicity The product and its components are not listed.

IARC Carcinogenicity phenolphthalein: 2B IARC Group 2B possibly carcinogenic to humans.

Specific Target Organ Toxicity - Single Exposure:

STOT - Single Exposure No Information available.

Specific Target Organ Toxicity - Repeated Exposure:

STOT - Repeated Exposure No Information available.

Name	II D50 Oral	LD50 Dermal	LC50 Inhalation
BORIC ACID (HBO2), SODIUM SALT, TETRAHYDRATE SODIUM METABORATE TETRAHYDRATE sodium oxido(oxo)borane	2330mg/kg Rat		
disodium metasilicate	770mg/kg Mouse		
sodium nitrite	157.9mg/kg Rat 175mg/kg Mouse 186mg/kg Rabbit 85mg/kg Rat		5.5mg/l (vapors) Rat 4 Hours
sodium carbonate	4090mg/kg Rat		2.3mg/l (vapors) Rat

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity No Information available.

Acute Toxicity - Fish LC50 96 Hours > 125.00ppm Onchorhynchus mykiss (Rainbow Trout)

Acute Toxicity - LC50 48 Hours > 1575.00ppm Daphnia magna

Aquatic Invertebrates

Acute Toxicity - Aquatic Plants EC50 72 Hours > 35.00ppm

Degradability No information available.

Bioaccumulative Potential No data available on bioaccumulation.

Mobility No information available.

Results of PBT and vPvB Assessment No information available.

Other Adverse Effects No information available.

Name	Acute Toxicity (Fish)	Acute oxicity (Aquatic Invertebrates)	Acute Toxicity (Aquatic
sodium nitrite	LC50 96 Hours 0.13mg/l Onchorhynchus mykiss (Rainbow Trout)	EC50 48 Hours 100.00mg/l Daphnia magna	
sodium carbonate	LC50 96 Hours <320.00mg/l Lepomis macrochirus (Bluegill)	LC50 96 Hours <565.00mg/l Daphnia magna	

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Management When handling waste, consideration should be made to the safety precautions applying to

handling of the product.

Disposal Methods Do NOT dump into any sewers, on the ground or into any body of water. Rinse containers

before disposal. Since emptied containers contain product residue, follow label warnings even after container is emptied. Dispose in accordance with all applicable federal, state and

local laws and regulations.

SECTION 14: TRANSPORT INFORMATION

UN No. (DOT/TDG) 1500 - SODIUM NITRITE

UN No. (IMDG) 1500-SODIUMNITRITE

UN No. (ICAO) 1500 - Sodium nitrite

DOT Proper Shipping Name 1500 - SODIUM NITRITE

TDG Proper Shipping Name 1500 - SODIUM NITRITE

DOT Hazard Class 5.1

DOT Hazard Label Class 5 - Oxidizing Substance (Division 5.1)

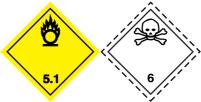
TDG Class 5.1

TDG Label(s) 5.1 +6.1

IMDG Class 5.1

ICAO Class 5.1

Transport Labels



DOT PackGroup III

IMDG Pack Group

Air Pack Group III

EMS F-A, S-Q

Environmentally Hazardous

Substance/Marine Pollutant

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

The Following ingredients are listed None Listed.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

Νo

The Following ingredients are listed None Listed.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

The Following ingredients are listed None Listed.

SARA 313 Emission Reporting

The Following ingredients are listed None Listed.

CAA Accidental ReleasePrevention

The Following ingredients are listed sodium nitrite

OSHA Highly Hazardous Chemicals

The Following ingredients are listed None Listed.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

The Following ingredients are listed phenolphthalein

California Air Toxics "Hot Spots" (A-I)

The Following ingredients are listed None Listed.

California Air Toxics "Hot Spots" (A-Ii)

The Following ingredients are listed None Listed.

Massachusetts "Right To Know" List

The Following ingredients are listed sodium nitrite

Rhode Island "Right To Know" List

The Following ingredients are listed None Listed.

Minnesota "Right To Know" List

The Following ingredients are listed None Listed.

New Jersey "Right To Know" List

The Following ingredients are listed sodium nitrite

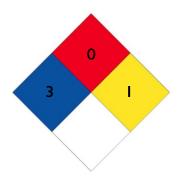
phenolphthalein

Pennsylvania "Right To Know" List

The Following ingredients are listed sodium nitrite

SECTION 16: OTHER INFORMATION

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)



HAZARDOUS MATERIAL INFORMATION SYSTEM (HMIS)

Health	3
Flammability	0
Physical Hazard	1
Personal Protection	Е

Revision Comments

Revision Date 07/22/2015
Revision |

Disclaimer

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.