Safety Data Sheet

FORMULA 1595

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name:

FORMULA 1595

Revised Date: 5/14/14

Chemical Name: Description:

See Section 3 See Section 3

Application Use: Cooling Water Biocide

COMPANY IDENTIFICATION

PHONE NUMBER: (610) 775-1505

PROASYS 318 HENDEL STREET SHILLINGTON, PA 19607

EMERGENCY PHONE NUMBERS

CHEMTREC (800) 424-9300

Outside USA: CHEMTREC COLLECT (703) 527-3887

SECTION 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Appearance and Odor: White tablets with faint halogen (chlorine) odor

Immediate Concerns: Has not been determined for this product. Please refer to Section 3 and 8.

POTENTIAL HEALTH EFFECTS

Acute Eye Effects: This material is corrosive to the eye. Direct contact may cause severe irritation, pain and burns, possibly severe, and permanent damage including blindness. The degree of injury depends on the concentration and duration of contact.

Acute Skin Effects: Prolonged contact may cause severe irritation or burns.

Acute Inhalation Effects: Inhalation of vapor or mist may cause irritation of the nose, throat, and respiratory tract. May cause coughing.

Acute Ingestion Effects: May be harmful if swallowed. Expected to cause gastrointestinal irritation. Do not take internally.

Chronic Effects from Repeated Overexposure: Other than short term effects, none established.

Medical Conditions Aggravated by Exposure:

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No.	Weight percent
1-Bromo-3-chloro-5,5-dimethylimidazolidine-2,4- dione	16079-88-2	> 95%

^{*}Exposure limit and regulatory information in Sections 8 & 15

SECTION 4 - FIRST AID MEASURES

Eye Contact: Immediately flush eyes with a directed stream of cool, clear water for at least 30 minutes. Forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissues. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Do not allow individual to rub their eyes. Get medical attention urgently, preferably from an ophthalmologist. Do not transport the vicitm until the recomended flushing period is completed, unless a portable emergency eye wash bottle is immediately available.

Skin Contact: Flush skin with plenty of water while removing contaminated clothing and shoes. Wash with soap and water. If irritation persists, get medical attention. Launder contaminated clothing before reuse.

Inhalation: Remove victim to fresh air. Get immediate medical attention. If breathing is difficult, have a trained person administer oxygen. If not breathing, give artificial respiration.

Ingestion: Drink several glasses of water. Feed bread soaked in milk followed by olive oil or cooking oil. Get immediate medical attention. Do not induce vomiting or give anything by mouth to an unconscious person.

Note to Physician:

Other Comments:

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point: 142°C (288°F)

Flammable Limits in Air: LFL - N.A.

UFL - N.A.

Extinguishing Media: Water spray or fog, foam, dry chemical or CO2

Special Fire Fighting Instructions: Avoid breathing fumes. Firefighters should wear protective equipment including full-faced mask self contained breathing apparatus which provides eye protection.

Decomposition products/Unusual Hazards: Hydrogen bromide, bromine, hydrogen chloride, chlorine.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Spill Containment and Clean-up Instructions:

Do not flush into surface water or sanitary sewer system. Sweep up or vacuum up spillage and collect in suitable container for disposal.

Environmental Precautions: This pesticide is toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public waters unless this product is specifically identified and addressed in an NPDES permit. Do not discharge effluent containing this product into sewer systems without previously notifying the sewage treatment plant authority. For guidance contact your state water board or regional office of the EPA. See Section 12 for Ecological Information.

SECTION 7 - HANDLING AND STORAGE

Handling and Storage:

Store and handle in accordance with all current regulations and standards. Keep container tightly closed and properly labeled. Store in a cool dry, well-ventilated area. Store below 212°F (100°C). Avoid exposure to sunlight or ultraviolet light. Keep separated from incompatible substances (See section 10 of the MSDS).

SECTION 8 - EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering Controls: Normal ventilation satisfactory. Provide local exhaust to keep vapors low.

PERSONAL PROTECTION EQUIPMENT

Respiratory: NIOSH/OSHA approved respirator, following manufacturer's recommendations, should be used as a precautionary measure where airborne. Contaminants may occur.

Eyes and Face: Chemical resistant goggles or face shield.

Hands and Skin: Chemical resistant rubber, neoprene latex or plastic

Other Protective Equipment: Eyewash station in area of use.

EXPOSURE GUIDELINES

Exposure Limits:

COMPONENT

TLV

N.A.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:

N.A.

Density (lb/gal):

Flash Point:

142°C (288°F)

Specific Gravity(@22°C): N.A.

Percent Volatile:

<1

pH (1% solution):

3.0 - 4.0

Vapor Pressure:

N.A.

Freeze Point:

N.A. 0.15%

Vapor Density:

N.A.

Solubility in Water:

Evaporation Rate:

N.A.

Viscosity:

N.D.

Appearance and Odor: White tablets with faint halogen (chlorine) odor

SECTION 10 - STABILITY AND REACTIVITY

Product Stability/Conditions to Avoid: Stable; Conditions to avoid: Excessive heat and moisture.

Incompatibility/Materials to Avoid: Concentrated acids, alkalines or oxidizing agents.

Hazardous Decomposition Products: Hydrogen bromide, bromine, hydrogen chloride, chlorine.

Hazardous Polymerization: Will not occur. Conditions to Avoid: none known.

SECTION 11 - TOXICOLOGY INFORMATION

ACUTE TOXICITY DATA

Ingestion Testing: Rat: LD50: 485 mg/kg Skin Testing: Rabbit: LD 50: > 2,000 mg/kg

Inhalation Testing: None established for this product. Refer to Section 3.

Eye Irritation: Rabbit: Result Corrosive: Method: OECD Test Guideline 404: Exposure time: 4 hours

CHRONIC TOXICITY DATA

Sensitization Testing: Buehler Test guinea pig: Result: Sensitising

Other Testing:

Information given is based on data on the components and the toxicology of similar products. No data is available on the product itself.

SECTION 12 - ECOLOGICAL INFORMATION

Aquatic Toxicity Data:

Rainbow trout: LC50 / 96hr: 0.65 mg/l

Daphnia magna (Water flea): EC50 / 48hr: 0.87 mg/l

Desmodesmus subspicatus (green algae): ErC50 / 72hr: 2.00 mg/l

activated sludge: EC50 / 3h: 20.00 mg/l

Information given is based on data on the components and the ecotoxicology of similar products.

Product Fate Data: None established for this product.

Biodegradation Data: None established for this product.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose of this material in an approved hazardous waste landfill. Obey all federal, state or local regulations.

SECTION 14 - TRANSPORT INFORMATION

US DEPARTMENT OF TRANSPORTATION (DOT) INFORMATION

Hazard Class: 5.1, (8) UN/NA ID Number: UN3085 Packing Group: PGIII

Shipping Name: OXIDIZING SOLID, CORROSIVE, N.O.S. (BROMOCHLORO-5,5-

DIMETHYLIMIDAZOLIDINE-2,4-DIONE)

VESSEL TRANSPORT (IMO/IMDG)

Hazard Class: 5.1, (8) UN/NA ID Number: UN3085
Packing Group: PGIII

Shipping Name: OXIDIZING SOLID, CORROSIVE, N.O.S. (BROMOCHLORO-5,5-

DIMETHYLIMIDAZOLIDINE-2,4-DIONE)

SECTION 15 - REGULATORY INFORMATION

US FEDERAL REGULATIONS

OSHA Hazards: Corrosive, Oxidizer

TSCA Status :

SARA 311/312 Hazards

: Acute Health Hazard

EPCRA - EMERGENCY PLANNING COMMUNITY RIGHT - TO - KNOW

SARA 313 Components: SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations

Massachusetts Right To Know Components: No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components: No components are subject to the Pennsylvania Right to know act **New Jersey Right To Know Components**: No components are subject to the New Jersey Right to know act **California Prop. 65 Components**: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

Federal regulatory information:

This product is EPA registered: EPA registration No: 6836-317

SECTION 16 - OTHER INFORMATION

HAZARD RATING SUMMARY

Hazard Rating System: NFPA CODE TRANSLATION Health: 3 0 = Minimal Hazard Flammability: 1 1 = Slight Hazard Reactivity: 0 2 = Moderate Hazard Special: 3 = Severe Hazard ОХ 4 = Extreme Hazard

Other Precautions: This product has been designed for use as a microbiocide in specific types of cooling water circuits and should be used only in accordance with the instructions provided by the technical representative servicing the facility. It may not be used for the treatment of potable water. Note: It is a violation of Federal law to use this product in a manner inconsistent with its labeling. A copy of the product's EPA approved label is available upon request.

MSDS REVISION SUMMARY

Revised Date

Revision Notes

5/14/14

Supersedes: 5/3/2011

ABBREVIATION CODE SUMMARY

N.A. - Not Applicable

N/A - Not Available

N.D. - Not Determined

N.E. - None Established