



SAFETY DATA SHEET

Date Issued : 07/19/2011
 SDS No. : Solus Brominating Plus
 Date Revised : 03/05/2020
 Revision No : 9

Solus Spa Collection Brominating Plus

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Solus Spa Collection Brominating Plus
GENERAL USE: Swimming Pool Sanitizer
PRODUCT DESCRIPTION: 1306N6SR
CHEMICAL FAMILY: Halogenated Hydantoin

MANUFACTURER

Suncoast Chemicals Company
 6385 150th Ave. N.
 Clearwater, FL 33760
Product Stewardship: (727) 531-8913

24 HR. EMERGENCY TELEPHONE NUMBERS

Chem-Tel 24-Hour Emergency # (800) 255-3924

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Acute Toxicity (Oral), Category 4
 Skin Sensitization, Category 1
 Skin Corrosion, Category 1B

Environmental:

Acute Hazards to the Aquatic Environment, Category 1

GHS LABEL



Corrosion



Environment



Exclamation
mark

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H302: Harmful if swallowed.
 H314: Causes severe skin burns and eye damage.
 H317: May cause an allergic skin reaction.
 H400: Very toxic to aquatic life.

PRECAUTIONARY STATEMENT(S)

Prevention:

P260: Do not breathe dust/fume/gas/mist/vapours/spray.
 P273: Avoid release to the environment.
 P280: Wear protective gloves/protective clothing/eye protection/face protection.
 P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 P304+P340: IF INHALED: Remove person to fresh air and keep 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.
 P310: Immediately call a POISON CENTER/doctor/...
 P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
 P391: Collect spillage.
 P264: Wash ... thoroughly after handling.
 P270: Do not eat, drink or smoke when using this product.



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P272: Contaminated work clothing should not be allowed out of the workplace.

P405: Store locked up.

P501: Dispose of contents/container to ...

P362+P364: Take off contaminated clothing and wash it before reuse.

HAZARDS NOT OTHERWISE CLASSIFIED: May form combustible dust concentrations in air. contact with water liberates toxic gas.

EUH031: Contact with acids liberates toxic gas.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS
Bromo-chloro-5, 5-dimethylhydantoin	94 - 98	32718-18-6

4. FIRST AID MEASURES

EYES: Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. See a doctor immediately.

SKIN: Remove contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

INGESTION: Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

INHALATION: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: causes serious eye damage

SKIN: Causes severe skin burns. Exposure to wet skin may cause burns.

SKIN ABSORPTION: May cause an allergic skin reaction

INGESTION: Harmful if swallowed

INHALATION: Irritant to upper respiratory tract. Shortness of breath, headache, and nausea.

NOTES TO PHYSICIAN: Corrosive. No specific antidote. In case of ingestion, DO NOT induce vomiting. Treat symptomatically and supportively. Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Dry powder, carbon dioxide or water spray. Water may be ineffective. In case of exothermic decomposition and appearance of smoke, water should be used to suppress it. DO NOT use dry chemical extinguisher containing ammonia compounds.

EXPLOSION HAZARDS: Forms explosive mixtures with combustible, organic or other easily oxidizable materials. When heated to decomposition, may release poisonous and corrosive fumes. Dust may form a weak explosive mixture with air (class St1), but is not sensitive to ignition from electrostatic discharges.

FIRE FIGHTING PROCEDURES: Cool containers with water spray. In closed stores, provide fire-fighters with self-contained breathing apparatus in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES: Evacuate area. Use respirator with combined filter (inorganic gas and dust), gloves, chemical safety goggles and body covering clothes. If material is decomposing, use self-contained breathing apparatus and a fully encapsulated suit. ENVIRONMENTAL PRECAUTIONS: Prevent entry into sewers and watercourses.

RELEASE NOTES: Sweep up, place in a suitable container and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pick up is complete.

SPECIAL PROTECTIVE EQUIPMENT: Use respirator with combined filter (inorganic gas and dust), gloves, chemical safety goggles and body



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covering clothes. If material is decomposing, use self-contained breathing apparatus and a fully encapsulated suit.

7. HANDLING AND STORAGE

HANDLING: Keep container tightly closed when not in use. Avoid contact with skin, eyes and clothing.

STORAGE: Keep away from all sources of ignition. Recommended storage temperature below 30°C. For transportation purposes, it is possible to store at temperatures up to 50°C. Store in a dry, well-ventilated area. Store away from incompatible materials (see "materials to avoid").

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)				
Chemical Name	EXPOSURE LIMITS			
	Type		ppm	mg/m ³
Bromo-chloro-5, 5-dimethylhydantoin	OSHA PEL	TWA	N/E	
	ACGIH TLV	TWA	N/E	

ENGINEERING CONTROLS: Use local exhaust as necessary, especially under dusty conditions. Ventilation must be sufficient to maintain atmospheric concentration below recommended exposure limit.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear chemical safety goggles.

SKIN: Wear neoprene gloves and body covering clothes and boots.

RESPIRATORY: Respirator with combined filter (inorganic gas and dust).

WORK HYGIENIC PRACTICES: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands thoroughly before eating or smoking. Safety shower and eye bath should be provided.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Solid

ODOR: Faint halogenous odor

APPEARANCE: White to off-white tablet

FLASHPOINT AND METHOD: Not Applicable

FLAMMABLE LIMITS: Not Available

AUTOIGNITION TEMPERATURE: Not Available

VAPOR PRESSURE: 9.35x10⁽⁻³⁾ Pa (25°C)

VAPOR DENSITY: Not applicable under standard conditions

BOILING POINT: Not Applicable

MELTING POINT: Not applicable (decomposes)

THERMAL DECOMPOSITION: > 160°C

SOLUBILITY IN WATER: .22 g/100ml at 25°C

PARTITION COEFFICIENT: N-OCTANOL/WATER: Kow = <1 (pH 5-9)

EVAPORATION RATE: Not applicable under standard conditions

SPECIFIC GRAVITY: 1.8 to 2.0

OXIDIZING PROPERTIES: Not sufficient for classification as oxidizer (Method A17 & UN Test 0.1)

10. STABILITY AND REACTIVITY



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REACTIVITY: No reactions known.

STABILITY: Stable under normal conditions.

CONDITIONS TO AVOID: Exposure to moisture. Heating above decomposition temperature.

POSSIBILITY OF HAZARDOUS REACTIONS: Contact with combustible materials may initiate decomposition of the material and emission of smoke.

HAZARDOUS DECOMPOSITION PRODUCTS: CO, HBr, Cl₂, NO_x, HCl, CO₂

INCOMPATIBLE MATERIALS: Oxidizing agents, bases, and combustible organic materials.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

ORAL LD₅₀: 929 mg/kg - Rat

SKIN CORROSION/IRRITATION: Corrosive

SERIOUS EYE DAMAGE/IRRITATION: Corrosive (expected)

RESPIRATORY OR SKIN SENSITISATION: Sensitizer

GERM CELL MUTAGENICITY: Mutagenic by the Ames Test. Mutagenic in the mouse lymphoma L5178Y test system. Non genotoxic in an in-vivo micronucleous test in mice. Non genotoxic in an in-vivo liver unscheduled DNA synthesis (USD) assay.

CARCINOGENICITY

IARC: Not classified as a carcinogen.

NOTES: Not included in NTP 14th Report on Carcinogens.

STOT-SINGLE EXPOSURE: No effects on specific target organs have been identified.

STOT-REPEATED EXPOSURE: No effects on specific target organs have been identified.

ASPIRATION HAZARD: Not expected to occur.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: BCDMH and the main degradation product DMH are biodegradable and do not persist in the environment.

BIOACCUMULATION/ACCUMULATION: Based on low Kow values, i.e. less than 1, BCDMH would not be predicted to significantly accumulate in aquatic organisms, or absorb to organic material in soil or sediment.

AQUATIC TOXICITY (ACUTE)

96-HOUR LC₅₀: 1.2 mg/l (eastern oyster, Acute flow through)

1.9 mg/l (Mysid shrimp, Acute flow through)

0.4 mg/l (Rainbow trout, Static)

0.46 mg/l (Bluegill sunfish, Static)

1.6 mg/l (Sheepshead minnow, Acute flow through)

48-HOUR EC₅₀: 0.75 mg/l (Static) (Daphnia Magna)

GENERAL COMMENTS: Mobility in soil: There will be no exposure of BCDMH to soil. The main degradation product, DMH, is mobile in soil.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of in approved landfill sites or an approved incinerator. Avoid access to streams, lakes or ponds. Observe all federal, state and local environmental regulations when disposing of this material.

EMPTY CONTAINER: Crush and bury empty containers. Do NOT throw into public waste disposal site. Avoid contact with organic materials and moisture. See conditions to avoid in Section 10.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)



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PROPER SHIPPING NAME: Oxidizing Solid, Corrosive, N.O.S. (Bromochloro-5, 5-Dimethylhydantoin)

PRIMARY HAZARD CLASS/DIVISION: 5.1

SECONDARY HAZARD CLASS/DIVISION: 8

UN/NA NUMBER: UN 3085

PACKING GROUP: III

LABEL: Oxidizing Agent (5.1) and Corrosive (8)

MARINE POLLUTANT #1: Yes

AIR (ICAO/IATA)

SHIPPING NAME: Oxidizing Solid, Corrosive, N.O.S. (Bromochloro-5, 5-Dimethylhydantoin)

UN/NA NUMBER: 3085

PRIMARY HAZARD CLASS/DIVISION: 5.1

SECONDARY HAZARD CLASS/DIVISION: 8

PACKING GROUP: III

PLACARDS: Environmentally hazardous substance

LABEL: Oxidizing agent (5.1) and Corrosive (8)

VESSEL (IMO/IMDG)

SHIPPING NAME: Oxidizing Solid, Corrosive, N.O.S. (Bromochloro-5, 5-Dimethylhydantoin)

UN/NA NUMBER: 3085

PRIMARY HAZARD CLASS/DIVISION: 5.1

SECONDARY HAZARD CLASS/DIVISION: 8

PACKING GROUP: III

MARINE POLLUTANT #1: Yes

LABEL: Oxidizing agent (5.1) and Corrosive (8)

15. REGULATORY INFORMATION

UNITED STATES

DOT LABEL SYMBOL AND HAZARD CLASSIFICATION



Oxidizing

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HEALTH HAZARDS: This product is a hazardous chemical under 29CFR 1910.1200 and is categorized as an IMMEDIATE, DELAYED HEALTH and REACTIVITY physical hazard.

313 REPORTABLE INGREDIENTS: This product does not contain a chemical listed at or above de minimis concentrations.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: Not listed.

FIFRA (FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT): This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Below you will find the hazard information that is required on the EPA pesticide label.

GENERAL COMMENTS: HAZARD INFO FOUND ON BROMINATING TABS EPA LABEL:



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DANGER. Corrosive. Causes irreversible eye damage and skin burns. Eye contact may cause loss of vision. Harmful if inhaled. Irritating to nose and throat. Harmful if absorbed through skin or swallowed. This product is toxic to fish and aquatic organisms. Strong oxidizing agent.

16. OTHER INFORMATION

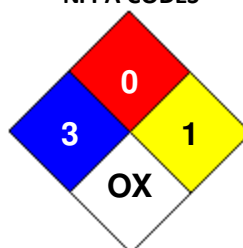
Date Revised: 03/05/2020

REVISION SUMMARY: This SDS replaces the 08/26/2019 SDS. Revised: **Section 1:** SDS No..

HMIS RATING

HEALTH	☐	3
FLAMMABILITY	☐	0
PHYSICAL HAZARD	☐	1
PERSONAL PROTECTION	☐	

NFPA CODES



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