GUARDIANCSC

# Safety Data Sheet
# GCS-3120
Revised: 04/16/14

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|---|---|
| **Health** | 2 |
| **Flammability** | 1 |
| **Reactivity** | 0 |

## Section 1 Identification

Product Name: GCS-3120

Product Description: Microbiocidal bactericide, fungicide, algicide and slimicide

Transport Emergency: Chemtrec

800-424-9300

Company: Guardian CSC

6000 Susquehanna Plaza Drive

York, PA 17406

800-297-8266

717-848-2570 Fax

## Section 2 Hazard Identification

Hazard Classification: Skin Irritation Category 2
Eye Irritation Category 2A

Signal Word: **Warning**

Hazard Statements: Causes skin irritation
Causes serious eye irritation

Precautionary statements

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| Prevention: | Keep out of reach of children.<br>Wash thoroughly after handling.<br>Wear protective gloves.<br>Wear safety goggles and a face shield.<br>In case of inadequate ventilation, wear respiratory protection. |
| Response: | If on skin: Wash with plenty of water. For specific treatment see Section 4.<br>If skin irritation occurs: Get medical attention.<br>Take off contaminated clothing and wash it before reuse.<br>If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>If eye irritation persists: Get medical attention.<br>If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.<br>If experiencing respiratory symptoms: Call a doctor |
| Storage: | See Section 7 |
| Disposal: | Dispose of contents/container in accordance with federal, state, and local regulations. |

## Section 3 Composition / Information on Ingredients

| Chemical | CAS Number | Concentration (wt%) |
|---|---|---|
| Dipropylene glycol | 25265-71-8 | 60 |
| 2,2-Dibromo-3-ntirilopropionamide | 1022-01-2 | 20 |
| Water | 7732-18-5 | 20 |

## Section 4 First-Aid Measures

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| Eyes: | Hold eye 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. |
| Skin: | Take off 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 the 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. |
| Notes to Physician: | Probable mucosal damage may contraindicate the use of gastric lavage. |

## Section 5 Fire-Fighting Measures

As in any fire, wear a self-contained breathing apparatus in pressure-demand MSH/NIOSH (approved or equivalent), and full protective gear. Move container from fire area if possible. Do not scatter spilled material with more water than needed for fire control and dike fire control water for later disposal. Use agents suitable for type of surrounding fire. Avoid breathing hazardous vapors and keep upwind.

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| Extinguishing Media: | Dry chemical, carbon dioxide, or water spray. |
| Special Procedures: | Cool containers with water spray. Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) in positive pressure mode. |
| Hazardous combustion products: | When heated to decomposition, may release poisonous and corrosive fumes ($Br_2$, HBr, NOx, and CNBr). |

## Section 6 Accidental Release Measures

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| Spill Response: | Avoid inhalation and dermal contact. Wear appropriate PPE as described in section 8. Isolate hazard area and deny entry. Avoid access to streams, lakes or ponds. Absorb on sand or vermiculite and place in closed container for disposal. Decontaminate spill area with 10% sodium bicarbonate solution. Absorb decontaminated solution with sand or vermiculite. Sweep up, place in a suitable container and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete. |
| Spill Notification: | Determine if federal, state, and/or local release notification is required. |

## Section 7 Handling and Storage

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| Handling: | Keep containers tightly closed. Wash thoroughly after handling. Remove contaminated clothing and wash before re-use. Avoid contact with eyes, skin and clothing. Empty containers retain product residue (liquid and/or vapor) and can be dangerous. Avoid contact with heat, sparks, and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks, or open flames. |
| Storage: | Store in a dry, cool, well-ventilated and shaded area, away from heat sources away from incompatible materials (see "incompatible materials" in Section 10). |

## Section 8 Exposure Controls/Personal Protection

| Potential Decomposition Products | OSHA PEL | ACGIH TLV | Other Exposure Limits |
|---|---|---|---|
| Bromine | 0.1 ppm TWA; 0.7 mg/m3 TWA | 0.1 ppm TWA; 0.2 ppm STEL | NIOSH: 0.1 ppm TWA; 0.7 mg/m3 TWA 3 ppm IDLH |
| Hydrogen Bromide | TWA = 3 ppm | STEL = 3 ppm (ceiling) | NIOSH: CEILING = 3 ppm IDLH = 30 ppm |

Exposure Controls: Provide local exhaust or general dilution ventilation system especially under mist conditions.

PPE:

Eye Protection: Wear chemical safety goggles and a face shield. Have eye wash stations available where eye contact can occur.

Hand Protection: Wear gloves impervious to conditions of use.

Body Protection: Wear appropriate impervious clothing. Have safety showers available where skin contact can occur.

Respiratory Protection: The specific respirator selected must be based on the contamination levels found in the workplace, must not exceed the working limits of the respirator, and must be jointly approved by NIOSH and MSHA. Normally a chemical cartridge respirator with an organic vapor cartridge(s) with a high-efficiency particulate filter and full face piece would be adequate.

## Section 9 Physical and Chemical Properties

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| Appearance: | Colorless to amber liquid | Melting point/freezing point: | -25 to -20°C |
| Odor: | Slight bromine odor | Initial boiling point and boiling range: | Not applicable |
| Odor threshold: | Not available | Evaporation rate: | <1 (ether = 1) |
| pH: | Not available | Vapor pressure: | 2266.5 Pa (20°C) |
| Relative density: | 1.16 – 1.21 | Vapor density: | Not applicable under standard conditions |
| Solubility: | Soluble in water | Partition coefficient: | Not available |
| Flammability: | Not flammable | Auto-ignition temperature: | Not available |
| Flash point: | 159 – 165°C | Decomposition temperature: | Not available |
| Upper/lower flammability or explosive limits: | Not available | Viscosity: | Not available |

## Section 10 Stability and Reactivity

Stability: This material is stable under normal temperatures and pressures.

Possibility of hazardous reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Exposure to light, heating product above 105°C.

Incompatible Materials: Oxidizing agents, reducing agents and bases.

Hazardous Decomposition Products: Bromine gas, hydrogen bromide, nitrous oxides, and cyanogen bromide

## Section 11 Toxicological Information

Health Hazards:

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| Eye: | Severe irritation or burning |
| Skin: | Moderate irritant, may cause skin sensitization. |
| Inhalation: | Irritation to upper respiratory tract. |
| Ingestion: | Severe irritation of the digestive tract. May be fatal if swallowed. |
| Delayed Effects: | None known |
| Chronic Effects: | Not available |
| Carcinogen: | No ingredients listed on NTP, IARC, or OSHA |
| Mutagenicity: | Not mutagenic by the Ames Test |

| Chemical | Acute Toxicity Data |
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| GCS-3120 | $LD_{50}$ (oral, rat) = 1387 mg/kg; $LC_{50}$ (inhalation, rat) > 1.05 mg/L/4 hr; $LD_{50}$ (dermal, rabbit) > 4000 mg/kg; Eye irritation (rabbit) – Severe irritant; Dermal irritation (rabbit) – Moderate irritant<br><br>Dermal sensitization – Sensitizer produces 100% sensitization rate (Magnusson & Kligman maximization study). |

## Section 12 Ecological Information

**Note:** The environmental toxicity data mentioned below are from studies conducted on active ingredient 2,2-Dibromo-3-nitrilopropionamide.

**Aquatic toxicity:**

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| -96 hour – $LC_{50}$, Fish | 2.3 mg/L (Rainbow trout) |
| | 3.4 mg/L (Sheepshead minnow) |
| | 2.3 mg/L (Bluegill sunfish) |
| | 0.72 mg/L (Mysid shrimp) |
| | 0.37 mg/L (Eastern oyster) |
| -48 hour – $EC_{50}$, Daphnia magna | 0.86 mg/L |

**Avian toxicity:**

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| -Oral $LD_{50}$, Bobwhite quail | 354 mg/kg |
| -Dietary $LC_{50}$, Mallard duck | >5620 ppm |
| -Dietary $LC_{50}$, Bobwhite quail | >5620 ppm |

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| Germany, water endangering classes (WGK) | 3 |

## Section 13 Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

## Section 14 Transport Information

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| Note: | Not regulated for non-bulk shipments. |
| DOT Shipping Name: | Environmentally hazardous substance, liquid, n.o.s. (2,2-dibromo-3-nitrilopropionamide) |
| DOT Hazard Class: | 9 (Misc. Hazardous Material) |
| UN Number: | UN3082 |
| Packing Group: | PGIII |

## Section 15 Regulatory Information

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| Toxic Substances Control Act (TSCA): | All components are listed on the TSCA Inventory of Chemical Substances. |
| SARA Title III/CERCLA Reportable Quantities (RQ): | No components listed. |
| SARA Section 302 Extremely Hazardous Substances: | No components listed. |
| SARA Section 311 Hazard Class: | This product is categorized as an immediate and delayed health hazard. |
| SARA Section 313 Toxic Chemicals: | On October 27, 1995, EPA published an administrative stay of the EPCRA section 313 reporting requirements for this chemical. Therefore, no Toxics Release Inventory reports are required for 2,2-dibromo-3-nitrilopropionamide until the stay is removed. |
| Waste Classifications: | This material does not meet RCRA`s characteristic definition of ignitability, corrosivity, or reactivity, and is not listed in 40CFR 261.33. The toxicity characteristic; however has not been evaluated by the Toxicity Characteristic Leaching Procedure (TCLP). |
| Workplace Classification: | This product is considered hazardous under the OSHA Hazard Communication Standard (29CFR 1910.1200). |
| Canada: | Ingredients are listed in DSL or NDSL |
| -WHMIS Hazard Class: | Not applicable. This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR. |
| EU: | Reported in EINECS |
| Japan: | Listed in MITI (ENCS No. 2-2795 2-413) |
| Australia: | Listed in AICS |
| China Inventory: | Listed |
| Korea: | Listed in the Korea Existing Chemicals Inventory (KECI) |
| Philippines: | Listed in PICCS |

## Section 16 Other Information

This Material Safety Data Sheet is offered solely for the customer's information, consideration, and investigation. Guardian CSC provides no express or implied warranties with respect to the information contained herein.

This material will not be sold for use in products for which prolonged contact with mucous membranes or abraded skin or implantation within the body is specifically intended. Because of the wide range of such potential uses, Guardian CSC is not able to recommend this material as safe and effective for such uses and assumes no liability for any such uses.

Although all data included in this MSDS is believed to be accurate, Guardian CSC makes no representations as to its accuracy, sufficiency, or completeness. Conditions of use are beyond Guardian CSC's control and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes. User assumes all risks of use, handling, and disposal of the product or from the use of, or reliance upon, information contained herein.

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|---|---|
| Revised By: | Matt Weir |
| Revised: | 04/16/14 |