

SECTION 1 - PRODUCT IDENTIFICATION

PRODUCT NAME: FORMULA 315
 PRODUCT USE: BIOCIDES
 RESTRICTIONS ON USE: Refer to label, available technical information, and other appropriate sections of this SDS.
 UN NUMBER: UN 3265
 PROPER SHIPPING NAME: UN 3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE), 8, PG II
 MANUFACTURER'S NAME: Garratt-Callahan Company
 ADDRESS: 50 Ingold Road, Burlingame, CA 94010-2206
 EMERGENCY PHONE: **North America: CHEMTREC: 1-800-424-9300**
Outside North America: +1-703-527-3887
 BUSINESS PHONE: Product Information: 650-697-5811
 SDS NUMBER: SD3315
 DATE OF REVISION: 12/11/2018

SECTION 2 - HAZARDS IDENTIFICATION

SIGNAL WORD: DANGER

GHS HAZARD STATEMENT:

H314: Causes severe skin burns and eye damage.
 H317: May cause an allergic skin reaction.



GHS PREVENTATIVE STATEMENTS:

P101: If medical advice is needed, have product container or label at hand.
 P102: Keep out of reach of children.
 P103: Read label before use.
 P260: Do not breathe dust/fume/gas/mist/vapours/spray.
 P264: Wash all exposed skin/hair thoroughly after handling.
 P272: Contaminated work clothing should not be allowed out of the workplace.
 P280: Wear protective gloves/protective clothing/eye protection/face protection.

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM

HEALTH HAZARD (BLUE)	3	Hazard Scale 0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe *=Chronic hazard
FLAMMABILITY HAZARD (RED)	0	
PHYSICAL HAZARD (YELLOW)	0	
PERSONAL PROTECTION		

**NFPA RATING
FLAMMABILITY**



SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Ingredients</u>	<u>CAS#</u>	<u>EC#</u>	<u>ICSC#</u>	<u>WT %</u>
MAGNESIUM DINITRATE	10377-60-3	233-826-7	1041	1-3
5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE	26172-55-4	247-500-7	NA	1-2
2-METHYL-4-ISOTHIAZOLIN-3-ONE	2682-20-4	220-239-6	NA	<1
MAGNESIUM CHLORIDE	7786-30-3	232-094-6	0764	<1

SECTION 4 - FIRST AID MEASURES

Exposed individuals must be taken for medical attention if any adverse effect occurs. Take copy of label and SDS to health professional with contaminated individual.

DANGER: Causes severe skin burns and eye damage. May cause an allergic skin reaction. Also refer to Section 11 for symptoms, effects, and likely routes of exposure for this product.

TARGET ORGANS:

ACUTE irritation of skin, eyes, respiratory and gastrointestinal systems.

CHRONIC irritation of skin, eyes, respiratory and gastrointestinal systems.

SKIN EXPOSURE: P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water[or shower]. P302+P352: IF ON SKIN: Wash with soap and water. Minimum flushing is for 15 minutes. P362+P364: Take off contaminated clothing and wash it before reuse. P333+P313: If skin irritation or rash occurs: Get medical advice/attention. P310: Immediately call a POISON CENTER or doctor/physician.

EYE EXPOSURE: P305+P351+P338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Use sufficient force to open eyelids. Have contaminated individual "roll" eyes. Minimum flushing is for 15 minutes. P310: Immediately call a POISON CENTER or doctor/physician.

INHALATION: P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P310: Immediately call a POISON CENTER or doctor/physician.

INGESTION: P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Rinse mouth. Never induce vomiting or give diluents (milk or water) by mouth to someone who is unconscious, having convulsions, or unable to swallow. P310: Immediately call a POISON CENTER or doctor/physician.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Skin and respiratory disorders, as well as conditions involving the "Target Organs" (see Section 3, Hazard Identification) may be aggravated by prolonged overexposures to this product.

NOTES TO PHYSICIAN: Treat symptoms as demonstrated by signs and distress in the patient.

SECTION 5 - FIRE FIGHTING MEASURES

SUITABLE (AND UNSUITABLE) EXTINGUISHING MATERIALS: Use extinguishing media appropriate for the surrounding fire.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL: Combustion generates toxic fumes of the following: Hydrogen chloride, Nitrogen oxides (Nox), Sulfur oxides.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS: Firefighters should wear fully protective clothing (chemical impermeable, fully encapsulated suit) and positive pressure self-contained breathing apparatus. Do not release run off from fire control methods to sewer or waterways. Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, ENVIRONMENTAL PRECAUTIONS AND EMERGENCY PROCEDURES.

WARNING: Any container expansion or rounding indicates pressure build-up. Use extreme caution. When opening, release pressure slowly through opening.

SPILL AND LEAK RESPONSE: Uncontrolled releases should be responded to by appropriately trained personnel using pre-planned procedures. Proper protective equipment should be used, refer to Section 8 - exposure controls.

Small Spill: Mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. P391: Collect spillage.

Large Spill: Restrict access to the area. Provide adequate protective equipment and ventilation. Stop leak if without risk. Remove chemicals which can react with the spilled material. Add dry inert material to contain and absorb spilled material. Prevent entry into surface waters, sewers, basements or confined areas, dike if needed. Ensure that exposure to product is not at a concentration exceeding regulatory limits. Decontaminate the area thoroughly. Decontaminate all response equipment with soapy water before returning to service. Place all spill residue in a suitable container and seal. P391: Collect spillage.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Keep out of reach of children. All employees who handle this material should be trained to handle it safely. Open containers slowly on a stable surface. As with all chemicals, avoid getting this product ON YOU or IN YOU. Avoid direct or prolonged contact with skin or eyes. Do not ingest. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing vapors, dusts or mists generated by this product. Use in a well-ventilated location. Remove contaminated clothing immediately. Use only as directed. Refer to Section 8 for exposure controls.

CONDITIONS FOR SAFE STORAGE: Containers of this product must be properly labeled. Storage areas of this product should be clearly identified, well-illuminated, clear of obstruction and accessible only to trained and authorized personnel. Store containers in a clean, cool, well ventilated, dry location, away from direct sunlight, away from incompatible materials at temperatures between 34°F (1°C) - 131°F (55°C). Keep container tightly closed when not in use. P405: Store locked up. Do not ingest. Do not breathe vapor mist. Wash hands after handling. Refer to Section 10 for incompatibilities. Do not store this material in containers made of the following: steel. CONTAINERS MAY BE HAZARDOUS WHEN EMPTY. Since emptied containers retain product residue, follow all MSDS and label warnings even after container is emptied. Expiration date based only on retention of >95% actives during storage at 20°C (68°F - 77°F).

SECTION 8 - EXPOSURE CONTROLS - PERSONAL PROTECTION

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation. Eyewash/safety shower station is recommended to be available near where this product is used/stored.

EXPOSURE LIMITS/GUIDELINES:

EXPOSURE LIMITS IN AIR

<u>CHEMICAL NAME</u>	<u>CAS#</u>	<u>ACGIH TLV</u>		<u>OSHA PEL</u>	<u>OTHER</u>
		<u>TWA</u>	<u>STEL</u>	<u>TWA</u>	
MAGNESIUM DINITRATE	10377-60-3	NE	NE	NE	NA
5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE	26172-55-4	NE	NE	NE	NA
2-METHYL-4-ISOTHIAZOLIN-3-ONE	2682-20-4	NE	NE	NE	NA
MAGNESIUM CHLORIDE	7786-30-3	NE	NE	NE	NA

NE = Not Established

INGESTION: Do not eat, drink or smoke when using this product.

RESPIRATORY PROTECTION: P260: Do not breathe dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Maintain airborne contaminant concentrations below guidelines listed above, if applicable. Air-purifying respirators with dust/mist/fume filters are recommended if operations may produce mists or sprays from this product.

EYE PROTECTION: Safety glasses or safety goggles. If splashing is anticipated, a face shield is recommended. P280: Wear protective gloves/protective clothing/eye protection/face protection. P264: Wash all exposed skin/hair thoroughly after handling.zd

SKIN PROTECTION: P264: Wash thoroughly after handling. P280: Wear protective gloves/protective clothing/eye protection/face protection. Use chemically-resistant gloves when handling this product. Use body protection appropriate for task (e.g., lab coat, overalls, gloves). P272: Contaminated work clothing should not be allowed out of the workplace.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE and COLOR:	Clear/yellow green liquid	VAPOR PRESSURE, mm Hg @ 20°C:	Not established
ODOR :	Pungent	VAPOR DENSITY (Air=1):	Not established
ODOR THRESHOLD:	Not established	RELATIVE DENSITY@20°C (water=1):	.95 - 1.0
pH:	2.0 - 5.0	SOLUBILITY IN WATER:	Completely soluble
MELTING/FREEZING POINT:	-3.00°C (26.60°F)	PARTITION COEFFICIENT(n-octanol/water):	Not established
BOILING POINT:	ca.100°C (212°F)	AUTOIGNITION TEMPERATURE:	Not established
FLASHPOINT:	Not applicable	DECOMPOSITION TEMPERATURE:	Not established
EVAPORATION RATE (n-BuAc=1	< 1	VISCOSITY: Dynamic - 3.000 mPa.s at 25°C (77°F)	
FLAMMABILITY (SOLID/GAS	Not applicable	VOLATILE ORGANIC COMPOUNDS (%):	None
FLAMMABLE LIMITS (in air by volume, %):	Not established		

SECTION 10 - STABILITY AND REACTIVITY

REACTIVITY: Product is not reactive under standard ambient temperature and pressure.

STABILITY: Stable under normal condition of use and storage.

POSSIBILITY OF HAZARDOUS

REACTIONS: None known.

CONDITIONS TO AVOID: See incompatible materials.

INCOMPATIBLE MATERIALS: Oxidizing agents, reducing agents, amines, mercaptans.

HAZARDOUS DECOMPOSITION

PRODUCTS: Thermal decomposition may yield the following: Hydrogen chloride, oxides of sulfur and nitrogen.

SECTION 11 - TOXICOLOGICAL INFORMATION

TOXICOLOGICAL EFFECTS: No data available for this product.

LIKELY ROUTES OF EXPOSURE: Skin, eye contact and inhalation.

RELATED SYMPTOMS: Skin, eye, respiratory and gastrointestinal irritation. May be harmful if swallowed.

DELAYED/IMMEDIATE/CHRONIC EFFECTS FROM SHORT AND

LONG TERM EXPOSURES: Skin, eye, respiratory and gastrointestinal irritation. May be harmful if swallowed.

NUMERICAL MEASURES OF

TOXICITY: Not established for this product.

CARCINOGENICITY: None of the components of this product are listed by the NTP, IARC, or regulated by OSHA AS carcinogens.

SECTION 12 - ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

ECOTOXICITY: No data available for this product.

PERSISTANCE AND DEGRADABILITY: Material is considered biodegradeable.

BIOLOGICAL ACCUMULATION POTENTIAL: No data available for this product.

MOBILITY IN SOIL: No data available for this product.

OTHER ADVERSE EFFECTS (i.e., hazardous to the ozone layer): No data available for this product.

Environmental Hazards:

This pesticide is toxic to aquatic plants, fish and aquatic invertebrates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA. Do not contaminate water by cleaning of equipment or disposal of waste. Apply this pesticide only as specified on the label.

BIOLOGICAL EXPOSURE INDICES: Currently, Biological Exposure Indices (BEIs) have not been determined for the components of this product.

SECTION 13 - DISPOSAL CONSIDERATIONS

DISPOSAL: Thoroughly drain/empty containers and offer for recycling. Refer to Section 8 for exposure controls - personal protection. P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14 - TRANSPORTATION INFORMATION

PROPER SHIPPING NAME

DOT: UN 3265, Corrosive liquid, acidic, organic, n.o.s. (5-Chloro-2-methyl-4-isothiazolin-3-one) 8, PG II
Emergency Response Guidebook, Guide No.: 153
Passenger Aircraft Qty: 1L
Cargo Aircraft Qty: 30L

IMDG/IMO: UN 3265, Corrosive liquid, acidic, organic, n.o.s. (5-Chloro-2-methyl-4-isothiazolin-3-one) 8, PG II

IATA/ICAO: UN 3265, Corrosive liquid, acidic, organic, n.o.s. (5-Chloro-2-methyl-4-isothiazolin-3-one) 8, PG II



ENVIRONMENTAL HAZARDS

(i.e., **MARINE POLLUTANT**): None known.

TRANSPORT IN BULK (according to annex II marpol 73/78 and the IBC code): Not applicable.

SPECIAL PRECAUTIONS FOR USER: None known.

PRODUCT REQUIRES CORROSIVE LABEL.

SECTION 15 - REGULATORY INFORMATION

United States and International Regulations

United States Regulations: U.S. SARA REPORTING REQUIREMENTS: The components of this product are subject to the reporting as listed below, requirements of Sections 302, 304, and 313 of Title of the Superfund Amendments and Reauthorization Act:

CHEMICAL NAME

MAGNESIUM DINITRATE	SARA 302 (40 CFR 355, Appendix A) - NO SARA 304 (40 CFR Table 302.4) - NO SARA 313 (40 CFR 372.65) - YES
5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE	SARA 302 (40 CFR 355, Appendix A) - NO SARA 304 (40 CFR Table 302.4) - NO SARA 313 (40 CFR 372.65) - NO
2-METHYL-4-ISOTHIAZOLIN-3-ONE	SARA 302 (40 CFR 355, Appendix A) - NO SARA 304 (40 CFR Table 302.4) - NO SARA 313 (40 CFR 372.65) - NO
MAGNESIUM CHLORIDE	SARA 302 (40 CFR 355, Appendix A) - NO SARA 304 (40 CFR Table 302.4) - NO SARA 313 (40 CFR 372.65) - NO

U.S. Regulations

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for the components of this product. The default Federal SDS submission and inventory requirement filing threshold of 10,000 lbs (4,540 kg) therefore applies, per 40 CFR 370.20.

U.S. CERCLA REPORTABLE QUANTITY (RQ): Not listed.

TSCA INVENTORY STATUS: The components of this product are listed on the TSCA Inventory, or are exempt.

SARA TITLE III Section 311/312 Hazard Category: Acute: YES; Chronic: NO; Fire: NO; Reactive: NO; Sudden Release of Pressure: NO

FIFRA Information

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. Following is the hazard information as required on the pesticide label:

DANGER.CORROSIVE. Causes irreversible eye damage and skin burns. May cause allergic skin reaction. Harmful if swallowed or absorbed through the skin. Harmful if inhaled.

Do not get in eyes, on skin, or on clothing. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Remove contaminated clothing and wash clothing before reuse. Mixers, loaders and others exposed to this product must wear: long-sleeved shirt and long pants; chemical resistant gloves such as nitrile or butyl rubber; shoes plus socks; goggles and face shield; and chemical resistant apron. Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exists, use detergent and hot water. Keep and wash PPE separately from other laundry. Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly.

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65): No component of this product is on the Proposition 65 list.

International Regulations

CANADIAN REGULATIONS:

CANADIAN DSL/NDL INVENTORY STATUS: The components of this product are on the DSL Inventories or are exempt from listing.

CANADIAN WHMIS CLASSIFICATION: Not classified.

SECTION 16 - OTHER INFORMATION

PREPARED BY: GARRATT CALLAHAN

DATE OF REVISION: 12/11/2018

Supercedes: 4/18/2018

Formula 315 is EPA-registered; with EPA Reg. No. 8540-23. Refer to the approved label for details.

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