

MATERIAL SAFETY DATA SHEET

Regalia®

MSDS DATE: 12/03/2012

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Regalia®
EPA REG. NO. 84059-3
MANUFACTURER: Marrone Bio Innovations
ADDRESS: 2121 Second Street Suite 107B Davis CA, 95618
EMERGENCY PHONE: Info Trac Chemical Response System 800 535 5053 (24 hours)
OTHER CALLS: 530-750-2800 (9am to 5 pm PST)
FAX PHONE: 530-750-2808
PRODUCT USE: Biofungicide, USDA-NOP and OMRI Listed

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

ACTIVE INGREDIENT:

Reynoutria spp extract

<u>CAS NO.</u>	<u>% WT</u>	<u>EXPOSURE LIMITS</u>
NONE	5	None Estabilshed

OTHER INGREDIENTS:

Water and other inert ingredients; USDA National Organic Program Compliant

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: This product has a low toxicity by ingestion, skin contact or inhalation.

POTENTIAL ROUTES OF ENTRY: Eyes, skin, inhalation and ingestion.

POTENTIAL HEALTH EFFECTS: Hazards in case of eye contact (slight to moderate irritant), of skin contact (slight irritant), of ingestion, of inhalation. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or possibly blistering

EFFECTS OF OVEREXPOSURE: If product comes in contact with eyes or skin, irritation may occur

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Not determined.

CHRONIC HEALTH HAZARDS: None known.

CARCINOGENICITY: Unknown, not expected to be carcinogenic.

SECTION 4: FIRST AID MEASURES

EYES: Hold eye open and rinse slowly and gently with water for at least 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Do not use an eye ointiment. Call poison control center or doctor for treatment advice.

MATERIAL SAFETY DATA SHEET

Regalia®

MSDS DATE: 12/03/2012

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

INGESTION: Call a 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 by a cpoison control center or phyicsion. Do not give anything by mouth to an unconscious person.

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

SECTION 5: FIRE-FIGHTING MEASURES

IGNITIBILITY:

F: > 205°F

C: >96°C

METHOD USED: SW 1010

BOILING POINT:

F: Unknown

C: Unknown

NFPA HAZARD CLASSIFICATION

HEALTH: 1

FLAMMABILITY: 1

REACTIVITY: 0

HMIS HAZARD CLASSIFICATION

HEALTH: 1

FLAMMABILITY:1

REACTIVITY: 0

SPECIAL FIRE FIGHTING PROCEDURES: Use Foam, Carbon Dioxide, or Dry Chemical extinguishers.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioxide, carbon monoxide, smoke, fumes, and hydrocarbons and terpenes.

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Wear suitable clothing such as eye protection, long-sleeved shirt, pants and shoes with socks. If spilled, contain - prevent run off into drains and waterways. Absorb liquid with an inert absorbent material. Seal absorbent material in a closed labeled container and dispose of in accordance with local ordinances.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight. Keep containers closed when not in use. Empty container completely and dispose of in accordance with all applicable federal, state and local environmental regulations.

OTHER PRECAUTIONS: No special precautions.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Spill controls should be provided for working with large quantities.

MATERIAL SAFETY DATA SHEET

Regalia®

MSDS DATE: 12/03/2012

VENTILATION : No TLV assigned. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and aerosols below the exposure levels. Ensure that eyewash stations and safety showers are proximal to the work-station location.

RESPIRATORY PROTECTION: Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

EYE PROTECTION: Safety goggles or glasses with side shields advisable.

SKIN PROTECTION: Wear chemical resistant gloves appropriate for the product.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Clothing to prevent prolonged skin contact as needed such as long-sleeved shirt, long pants and shoes with socks.

WORK HYGIENIC PRACTICES: Wash any contamination from skin or eyes immediately. Wash hands and exposed skin before eating, drinking, smoking after work or using the toilet.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Brown Liquid

ODOR: Characteristic of plant extracts/ Grass-like odor

DENSITY: 1.05 g/ml

pH: 5-6

SOLUBILITY IN WATER: Miscible in Water

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable

INCOMPATIBILITY (MATERIAL TO AVOID): None known.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: None known

HAZARDOUS POLYMERIZATION: Not known to occur.

CONDITIONS TO AVOID (POLYMERIZATION): None.

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE ORAL TOXICITY LD ₅₀ :	>5000 mg/kg (rat)
ACUTE DERMAL TOXICITY LD ₅₀ :	>5000 mg/kg (rabbit)
ACUTE INHALATION LC ₅₀ :	>2.11 mg/L (rat)
EYE IRRITATION:	Mildly irritating (rabbit)
SKIN IRRITATION:	Slightly irritating (rabbit)
SKIN SENSITIZATION:	Non-sensitizing (guinea pigs)

SECTION 12: ECOLOGICAL INFORMATION

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash water.

MATERIAL SAFETY DATA SHEET

Regalia®

MSDS DATE: 12/03/2012

SECTION 13: DISPOSAL CONSIDERATIONS

Do not reuse containers. Dispose of in accordance with all applicable federal, state, and local environmental regulations.

SECTION 14: TRANSPORTATION INFORMATION

U.S. DOT: Not Regulated

IATA DGR: Not regulated

IMDG: Not Regulated

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

OSHA: Not applicable

TSCA: Exempt

CERCLA: Not applicable.

SARA TITLE III HAZARD CLASSIFICATION SECTIONS 311 AND 312:

Immediate (acute) Health: None

Delayed (chronic) Health: None

Fire: None

Sudden Release of Pressure: None

Reactivity: None

STATE REGULATIONS: None

INTERNATIONAL REGULATIONS: Not applicable

SECTION 16: OTHER INFORMATION

DISCLAIMER: IN NO EVENT SHALL MARRONE BIO INNOVATIONS BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES. THE DATA PROVIDED IS FOR GENERAL INFORMATION ONLY AND IS NOT INTENDED AS A COMPREHENSIVE GUIDE CONCERNING HAZARDS THAT MAYBE ASSOCIATED WITH THIS PRODUCT. USER ASSUMES ALL RESPONSIBILITY FOR FOLLOWING PROPER SAFETY PROTOCOL AND CONSULTING TRAINED PERSONNEL FOR CONTROL AND CONTAINMENT.