Seachem Just add water. We'll do the rest.

SEACHEM LABORATORIES, INC. **SAFETY DATA SHEET**

This data sheet was prepared in conformity with the Globally Harmonized System as promulgated by European Directives (EC) No. 1272/2008 and 1907/2006/EC. Accordingly, it is only for informational purposes as intended thereby.

Reef Complete

Section 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Reef Complete
OTHER PRODUCT NAMES:
PRODUCT USE: Mineral Supplement for Ornamental Aquariums

SUPPLIER DETAILS

COMPANY NAME:	Seachem Laboratories, Inc.
ADDRESS:	1000 Seachem Drive, Madison, GA 30650 USA
TELEPHONE NUMBER FOR INFORMATION:	706-343-6060
EMERGENCY TELEPHONE NUMBER:	706-343-6060
DATE OF PREPARATION:	Oct 23, 2011
DATE OF LAST REVISION:	June 26, 2012

Section 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008

Eye Irritant Category 2
Xi; R36

Label elements:
Labeling according to Regulation (EC) No 1272/2008:

Hazard Pictograms:

Signal Words: Irritant
Hazard Statements/Risk Phrases: Irritating to eyes.
Other Hazards: None

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS)
Health Hazard (Blue): 1 – Minor
Flammability Hazard (Red): 0 – Minimal
Physical Hazard (Yellow): 0 – Minimal
Protective Equipment: See section 8

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD RATINGS
Health (Blue): 0 – Minimal
Flammability (Red): 0 – Minimal
Instability (Yellow): 0 – Minimal
Other (White): None

Section 3: COMPOSITION and INFORMATION ON INGREDIENTS

Chemical Characterization: Mixture
Description: A Mixture of the substances below with harmless additions.
Dangerous Components:

CALCIUM CHLORIDE CAS# 10043-52-4 EC# 233-140-8 Concentration 10% < 25%

Other information: Proprietary solution of naturally occurring minerals and salts.

Section 4: FIRST AID MEASURES

GENERAL INFORMATION: Avoid contact with eyes.

INGESTION: Rinse mouth with water and drink a glass of water. Further first aid not generally required. If in doubt, contact a poison information center or a doctor.

EYE CONTACT: Rinse eye(s) immediately with running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Have victim "roll" eyes. Minimum flushing time is 15 minutes without interruption. If pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN CONTACT: Flush skin with running water. Use soap if available.

INHALATION: If irritation arises, remove victim from contaminated area to fresh air.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None

RECOMMENDATIONS TO PHYSICIANS: Treat symptomatically. No further relevant information available.

SYMPTOMS OF OVEREXPOSURE:

Ingestion - This is not anticipated to be a likely route of overexposure for this product. If the product is swallowed, significant adverse effects are not expected to occur. Ingestion of large quantities may cause upset to the gastrointestinal system.

Eye Contact – Significant irritation can occur including pain, itching, and redness. Symptoms should be alleviated after flushing eyes with water.

Skin Contact – May cause skin irritation including itching and redness. Symptoms should be alleviated after rinsing skin with water.

Inhalation – Mild irritation of the tissues of the nose, mouth, throat and upper respiratory system. Symptoms may include coughing, sneezing, and difficulty breathing. Symptoms should be alleviated upon exposure to fresh air.

Section 5: FIRE-FIGHTING MEASURES

FLASH POINT: Not Applicable
AUTOIGNITION TEMPERATURE: Not Applicable
FLAMMABLE LIMITS (in air by volume, %): Not Applicable
Lower Explosive Limit (LEL): Not Applicable
Upper Explosive Limit (UEL): Not Applicable
FIRE EXTINGUISHING MATERIALS: Use fire extinguishing materials appropriate for surrounding fire.
Water Spray: yes Foam: yes Carbon Dioxide: yes Dry Chemical: yes Halon: no Other: yes

UNUSUAL FIRE AND EXPLOSION HAZARDS: None
Explosion Sensitivity to Mechanical Impact: Not Sensitive
Explosion Sensitivity to Static Discharge: None
SPECIAL FIRE-FIGHTING PROCEDURES: Structural fire-fighters must wear Self-Contained Breathing Apparatus and full protective equipment. Water spray can be used to cool fire-exposed containers. If necessary, decontaminate fire-response equipment with soap and water solution.

Section 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:
Avoid contact with eyes and skin.
ENVIRONMENTAL PRECAUTIONS:
No special measures required.
SPILL AND LEAK RESPONSE:
Dilute with water and clean spill with absorbent material.

REFERENCE TO OTHER SECTIONS:
No Dangerous Materials Are Released.
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

Section 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Avoid contact with eyes and skin.

INFORMATION ABOUT PROTECTION AGAINST EXPLOSIONS AND FIRES: No special requirements.

STORAGE AND HANDLING PRACTICES: No special requirements.

Section 8: EXPOSURE CONTROLS-PERSONAL PROTECTION

VENTILATION AND ENGINEERING CONTROLS: No special considerations.

EXPOSURE LIMITS/GUIDELINES:
No Data Available

RESPIRATORY PROTECTION:
Not required.

EYE PROTECTION:
Recommended

HAND PROTECTION:
Wear neoprene or butyl rubber gloves for routine industrial use. If necessary, refer to U.S. OSHA 29 CFR 1910.138, or relevant European, Canadian, Australian or Japanese Standards.

BODY PROTECTION:

Use body protection appropriate for the task (e.g., apron, lab coat, overalls, etc.) If necessary, refer to appropriate Standards of Canada, the European Union, Australia, or Japan.

Section 9: PHYSICAL and CHEMICAL PROPERTIES

Boiling Point	102° C	Specific Gravity (H_2O = 1)	1.25
Vapor Pressure (mm Hg)	23.8@25° C	Melting Point	NA
Vapor Density (AIR = 1)	<1 H_2O	Evaporation Rate (Butyl Acetate = 1)	0.3
Solubility in Water	Soluble	Appearance and Odor	Hazy blue liquid, no odor

Section 10: STABILITY and REACTIVITY

STABILITY:

This product is stable under normal conditions of use.

DECOMPOSITION PRODUCTS:

None

MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: No Data

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: No further relevant information available

Section 11: TOXICOLOGICAL INFORMATION

The specific toxicology data available for components greater than 1% in concentration are as follows:

TOXICITY :

CARCINOGENIC INFORMATION:

Not considered carcinogenic

IRRITANCY OF PRODUCT:

May seriously irritate eyes or soft tissue.

SENSITIZATION TO THE PRODUCT:

The components of this product are not known to be human skin or respiratory sensitizers.

REPRODUCTIVE TOXICITY INFORMATION: Listed below is information concerning the effects of the components of this product on the human reproductive system.

Mutagenicity: The component of this product is not reported to produce mutagenic effects in humans.
Embryotoxicity: The component of this product is not reported to produce embryotoxic effects in humans.
Teratogenicity: The component of this product is not reported to produce teratogenic effects in humans.
Reproductive Toxicity: The component of this product is not reported to cause reproductive effects in humans.

ACGIH BIOLOGICAL EXPOSURE INDICES:

Currently, there are no Biological Exposure Indices determined for this product.

Section 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL STABILITY:

This product will not biodegrade in the environment.

EFFECT OF MATERIAL ON PLANTS OR ANIMALS:

This product is not expected to cause harm to plants or animals. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

EFFECT OF CHEMICAL ON AQUATIC LIFE:

This product is not harmful to aquatic life.

Section 13: DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL:

Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, those of Canada, EU Member States, Australia, and Japan.

U.S. EPA WASTE NUMBER: Not applicable for wastes of this product.

EUROPEAN UNION EWC CODE: Waste from this product is NOT considered as a hazardous waste pursuant to the relevant EEC Directive on hazardous waste, and is NOT subject to the provisions of that directive.

Section 14: TRANSPORTATION INFORMATION

This product is NOT hazardous as defined by (1) the U.S. Department of Transportation (49 CFR 172.101), (2) per regulations of Transport Canada, (3) per the International Air Transport Association, (4) per rules of the International Maritime Organization, (5) per the Economic Commission for Europe (European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR)). Additionally, this product is NOT classified as a Marine Pollutant as defined by 49 CFR 172.101 Appendix B, U.S. Department of Transportation).

Section 15: REGULATORY INFORMATION

ADDITIONAL UNITED STATES REGULATIONS:
U.S. SARA REPORTING REQUIREMENTS: The component of this product is NOT subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.
U.S. SARA THRESHOLD PLANNING QUANTITY: The component of this product has no specific Threshold Planning Quantity. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 pounds (4540 kg) therefore applies, per 40 CFR 370.20.
U.S. SARA HAZARD CATEGORIES (SECTION 311/312, 40 CFR 370-21): ACUTE: No; CHRONIC: No; FIRE: No; REACTIVE: No; SUDDEN RELEASE: No
U.S. TSCA INVENTORY STATUS: The component of this product is listed on the TSCA Inventory.
U.S. CERCLA REPORTABLE QUANTITY (RQ): Not applicable
OTHER U.S. FEDERAL REGULATIONS:

- The component of this product is not subject to the reporting requirements of CFR 29 1910.1000.
- The component of this product is not subject to the reporting requirements of Section 112® of the Clean Air Act.
- The component of this product is not a Class I or Class II ozone depleting chemical (40 CFR part 82).
- The component of this product is not listed under Table 1 as Regulated Substances, per 40 CFR, Part 68, of the Risk Management for Chemical Release Prevention.

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): The component of this product is not on the California Proposition 65 Lists.

ADDITIONAL CANADIAN REGULATIONS:
CANADIAN DSL/NDSL INVENTORY STATUS: The component of this product is included in the DSL Inventory.
CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS: The component of this product is not on the CEPA Priorities Substances Lists.
CANADIAN WHMIS CLASSIFICATION: This product does not meet the criteria to be classified as a Controlled Product.
CANADIAN WHMIS SYMBOLS: Not applicable.

ADDITIONAL EUROPEAN UNION REGULATIONS:
EU LABELING/CLASSIFICATION: Eye Irritant Category 2.
EU CLASSIFICATION: Irritant.
EU RISK PHRASES: Irritating to Eyes.
EU SAFETY PHRASES: Keep out of reach of children. Avoid contact with skin.
EUROPEAN COMMUNITY ANNEX II HAZARD SYMBOL:

EUROPEAN UNION CLASSIFICATION ON COMPONENTS:

Component: Calcium Chloride. See above.

INVENTORY STATUS:

The component of this product is listed in the European Inventory of Existing Commercial Chemical Substances (EINECS).

The component of this product is NOT listed in the European List of Notified Chemical Substances (ELINCS).

Section 16: OTHER INFORMATION

This Material Safety Data Sheet is offered pursuant to European Community Regulation (EC) No. 1272/2008 as well as OSHA's Hazard Communication Standard,29 CFR 1910.1200. Other government regulations must be reviewed for applicability to this product. To the best of Seachem Laboratories' knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are not guaranteed and no warranties of any type, either express or implied, are provided. The information contained herein relates only to this specific product. If this product is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition. The information herein is proffered in good faith according to the terms of applicable laws and regulations rightfully passed by and within the sovereign entities in which this product may be sold.

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ABBREVIATIONS AND DEFINITIONS

ACGIH	American Conference of Governmental Industrial Hygienists
ADR	The European Agreement Concerning the International Carriage of Dangerous Goods by Road (Economic Commission for Europe)
Autoignition Temperature	Minimum temperature required to initiate combustion in air with no other source of ignition.
Biological Exposure Indices	Reference values intended as guidelines for the evaluation of potential health hazards in the practice of industrial hygiene, published by the ACGIH. BEIs represent the levels of determinants that are most likely to be observed in specimens collected from a healthy worker who has been exposed to chemicals to the same extent as a worker with inhalation exposure to the TLV.
CAL/OSHA	The Division of Occupational Safety and Health for the State of California.
CAS #	This is the Chemical Abstract Service Number that uniquely identifies each constituent.

CEPA	Canadian Environmental Protection Act
CERCLA	The United States Comprehensive Environmental Response, Compensation, and Liability Act, sometimes known as the Superfund Act
CFR	The US Code of Federal Regulations
CSA	The Canadian Standards Association
DOT	The United States Department of Transportation
DSL/NDSL	The Canadian Domestic/Non-Domestic Substances List
EC #	This is sometimes known as the EINECS # (European Inventory of Now-Existing Chemical Substances), which uniquely identifies each constituent.
Embryotoxin	A chemical which causes damage to a developing embryo (i.e., within the first eight weeks of pregnancy in humans), but the damage does not propagate across generational lines.
EN	European standards for products and services by European Committee for Standardization (Comité Européen de Normalisation).
EPA	The United States Environmental Protection Agency.
EPA Waste Number	A code developed by the EPA to identify characteristics of hazardous waste (e.g., ignitability, corrosivity, reactivity, etc.)
EU	European Union
EWC	European Waste Catalogue, a publication of the European Union, which catalogs hazardous chemical wastes.
Flash Point	Minimum temperature at which a liquid gives off sufficient vapors to form an ignitable product with air.
HMIS	Hazardous Materials Identification System, a rating system developed by the National Paint and Coating Association that has been adopted by industry to identify the degree of chemical hazards.
H-Phrase H320	Causes eye irritation
H-Phrase H335	May cause respiratory irritation
IARC	International Agency for Research on Cancer, an agency of the World Health Organization.
IATA	International Air Transport Association
IDLH	Immediately Dangerous to Life and Health. This level represents a concentration from which one can escape within 30 minutes without suffering escape-preventing or permanent injury.
IMO	International Maritime Organization
LD_{50}	Lethal Dose 50%, or median lethal dose, the dose of a toxin, pathogen, or radiation required to kill half the members of a tested population after a specified test duration. The LD_{50} is frequently used as a general indicator of a substance's acute toxicity.
LEL	Lower Explosive Limit, the lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source.
Mutagen	A chemical which causes permanent changes to genetic material (DNA) such that the changes will propagate through generational lines.
NFPA	National Fire Protection Association, which has established a rating system for chemical hazards.
NIOSH	National Institute for Occupational Safety and Health, a Federal research agency focusing on occupational safety and health.
NTP	National Toxicology Program, an agency of the Federal Department of Health and Human Services.
OSHA	Occupational Safety and Health Administration, an agency of the United States Department of Labor.
PEL	Permissible Exposure Limit. This has the exact same meaning as TLV, except that it is enforceable by OSHA.

REL	Recommended Exposure Limit. This has the same meaning as TLV, but is a recommendation by NIOSH.
Reproductive Toxin	Any substance which interferes in any way with the reproductive process.
RID	International Regulations Concerning the Carriage of Dangerous Goods by Rail
SARA	Superfund Amendments and Reauthorization Act
SCBA	Self-Contained Breathing Apparatus
STEL	This is the 15-minute Short Term Exposure Limit reported under Threshold Limit Value and OSHA's Permissible Exposure Limit.
TC	Transport Canada
Teratogen	A chemical which causes damage to a developing fetus, but the damage does not propagate across generational lines.
TLV	Threshold Limit Value , the airborne concentration of a substance which represents conditions under which it is generally believed that nearly all workers may be repeatedly exposed without adverse effect. The duration must also be considered. See the definitions of TWA and STEL.
TSCA	The United States Toxic Substances Control Act
TWA	This is the 8-hour Time Weighted Average reported under Threshold Limit Value and OSHA's Permissible Exposure Limit.
UEL	Upper Explosive Limit, the highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source.
WHMIS	Canadian Workplace Hazardous Materials Information System

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