

Material Safety Data Sheet

Aquatic BioScience, LLC
(707) 964-9659

January 2006

SECTION I - IDENTIFICATION

Trade Name:	Real Clear® Lowers pH
Name and/or Family or Description:	Sodium Bisulfate Anhydrous
Chemical Formula:	NaHSO ₄
CAS No.:	7681-38-1
DOT Proper Shipping Name:	Chemicals Not Otherwise Indexed (NOI), Non-Hazardous
DOT Hazard Class:	Not Regulated
DOT Label:	None

SECTION II - COMPONENTS (Hazardous & Other)

<i>Hazardous ingredients:</i>	<i>EXPOSURE LIMITS, PPM</i>
<i>OSHA ACGIH OTHER</i>	
<i>Components CAS No. Wt% PEL TLV LIMIT HAZARD</i>	
<i>Sodium Bisulfate [7681-38-1] 93.2%</i>	<i>None None None Irritant</i>
<i>Sodium Sulfate None Given 6.5</i>	<i>None None None Irritant</i>

SECTION III - PHYSICAL DATA

State:	Powdered dry
Appearance:	Off white beads or powder
Odor:	None
Bulk Density	83 lb/cu. ft.
Melting Point:	Degrees - 350 F
Volatile:	Non Volatile
Flashpoint	N/A. Will not burn.
Solubility %:	100%
Storage Conditions:	Store tightly closed in cool place.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point:	N/A
Ignition Temperature:	N/A
Special Fire Fighting Procedure:	As toxic fumes of ammonia and sulfur oxides may be released violently at high temperatures, full protective clothing and NIOSH-approved self-contained breathing apparatus should be worn. Use water to keep fire-exposed containers cool.
Extinguishing Media:	Water or dry chemical.
Unusual Fire Explosion Hazards:	May explode if mixed with oxidizers, such as potassium, nitrate, or potassium chlorate.

SECTION V - HEALTH HAZARD DATA

Primary Routes Of Exposure: Inhalation, skin or eye contact.

SIGNS AND SYMPTOMS OF EXPOSURE:

Inhalation: Breathing dust may irritate the nose and throat and cause coughing and chest discomfort. Excessive contact can cause damage to the nasal septum. May burn nose, throat and lungs. No exposure limit established.

Eye Contact: Dust will irritate the eyes and prolonged contact will damage the eyes. Mild to severe irritant. May cause burns if not flushed with water immediately.

Skin Contact: Prolonged or repeated contact with the dust may irritate the skin with blistering and redness. Solutions may cause severe irritation or burns.

Swallowed: Swallowing large quantities may cause nausea, vomiting, abdominal pain, diarrhea and collapse. May irritate mouth, lungs and stomach.

Chronic Effects Of Exposure: May cause sensitization

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NONE REPORTED

SECTION VI - EMERGENCY AND FIRST AID PROCEDURES

If Inhaled: Remove to fresh air. Give artificial respiration if not breathing. Get immediate medical attention. Mild burning sensation may occur to mucous membranes and upper respiratory tract.

In Case Of Eye Contact: Immediately flush eyes with lots of running water, lifting the upper and lower eyelids occasionally. Get immediate medical attention.

In Case Of Skin Contact: Immediately wash skin with lots of soap and water. Remove contaminated clothing and shoes; wash before reuse. Get medical attention if irritation persists after washing. May cause burns if not flushed with water.

IF SWALLOWED: Do not induce vomiting. If conscious, give lots of water or milk. Get immediate medical attention. Do not give anything by mouth to an unconscious or convulsing person. May cause mild burning in mouth or esophagus.

NOTES TO PHYSICIAN: Natural watering of the eyes will dissolve sodium bisulfate, forming a weak sulfuric acid solution which may cause burns. Flush affected area thoroughly with water. Do not use chemical antidotes or neutralizing solutions.

SECTION VII - REACTIVITY DATA

STABILITY: Stable

POLYMERIZATION: Will not occur

CONDITIONS TO AVOID: Excessive heat and contamination of any kind

MATERIALS TO AVOID: Oxidizing agents attack the organic components of these products. As with other organic carbonaceous compounds, these reactions result in heat which is contained in a confined space can cause fires. Hypochlorites, chlorinated isocyanurates, and perborates are examples of oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: No uniquely hazardous decomposition products are expected. If the organic portion of product is burned, as with any nitrogen containing organic material, oxides or nitrogen, carbon dioxide, and water can be produced. Partial combustion may produce, in addition to the above, soot and various oxides of carbon.

SECTION VIII - SPILL, LEAK, AND DISPOSAL INFORMATION

WASTE DISPOSAL: Dispose of in a sanitary chemical landfill which complies with all local, state, and federal regulations.

SPILL OR LEAKAGE PROCEDURES: Wear suitable clothing and protective equipment which includes rubber boots, gloves and apron and a self contained breathing apparatus. Sweep up.

SECTION IX - SAFE HANDLING AND USE INFORMATION

Permissible Concentrations: Not established

Respiratory Protection: Wear suitable NIOSH-approved dust masks or respiratory protector where local ventilation exhaust is not available or dusty situations are likely to result.

Ventilation: Provide ventilation to keep exposure below Nuisance Dust Limits. Local exhaust ventilation preferred.

OTHER PROTECTIVE EQUIPMENT: Eye wash facility

Storage and Handling: Maintain good housekeeping, avoid creating aerosol. Keep out of direct sunlight and in cool dry place as deterioration of product and loss of activity may occur under above conditions.

Eye Protection: ANSI approved safety glasses with side protection. It is generally recognized that contact lenses should not be worn when working with chemicals because contact lenses may contribute to the severity of an eye injury.

Skin Protection: Long sleeved shirt, trousers, safety shoes, and gloves.

Hygienic Practices: Wash hands after handling, as well as any other affected skin areas. Avoid contact with food or food preparatory surfaces. If this occurs wash the area thoroughly with suitable detergent and water. Remove and wash contaminated clothing.

SECTION X - HAZARDOUS ACTIVITY

STABILITY: Stable

POLYMERIZATION: Will not occur

CONDITIONS TO AVOID: Store in a cool, dry place to avoid moisture contact.

MATERIALS TO AVOID: Avoid contact with strong alkaline materials such as caustic. Reacts with water to form a weak acid solution. Do not mix with liquid chlorine bleach, ammonia cleansers or similar products.

HAZARDOUS DECOMPOSITION: None, unless heated over 570 F, at which sulphur dioxide and sulphur trioxide are formed.

HAZARDOUS DECOMPOSITION PRODUCTS: May liberate carbon monoxide or carbon dioxide and oxides of sodium.

SECTION XI - TOXICITY DATA

ORAL: Rats LD50 = 4 G/KG.

DERMAL: Rabbits 500 MG/24 HR; Moderate Irritation.

INHALATION: No Data Found

CARCINOGENITY: This material is not considered to be a carcinogen by The National Toxicology Program, The International Agency For Research And Cancer, Or The Occupational Safety And Health Administration.

SECTION XII - ECOLOGICAL INFORMATION

None found

SECTION XIII - WARNING STATEMENTS

Caution! Keep out of reach of children. May cause eye or skin irritation. Store in a cool dry place. Avoid contact with skin and clothing and excessive inhalation. Wash hands, clothing and equipment after use.

SECTION XIV - SPECIAL PRECAUTIONS

Precautions To Be Taken In Handling And Storing: Maintain good housekeeping, avoid creating aerosols. For maintenance of product quality, store in dry cool (under 110°F) warehouse conditions.

KEEP OUT OF REACH OF CHILDREN

ALTHOUGH THE INFORMATION AND RECOMMENDATIONS SET FORTH IN THIS SHEET ARE BELIEVED TO BE CORRECT AS OF THE DATE HEREOF, AQUATIC BIOSCIENCE, LLC MAKES NO REPRESENTATION AS TO THE COMPLETENESS OR ACCURACY OF SUCH INFORMATION AND RECOMMENDATIONS. AQUATIC BIOSCIENCE, LLC SHALL IN NO EVENT BE RESPONSIBLE FOR ANY DAMAGES OF WHATSOEVER NATURE DIRECTLY OR INDIRECTLY RESULTING FROM THE PUBLICATION OR USE OF OR RELIANCE UPON SUCH INFORMATION AND RECOMMENDATIONS. YOU ARE ENCOURAGED TO ADVISE ANYONE WORKING WITH OR EXPOSED TO SUCH PRODUCTS OF THE INFORMATION CONTAINED HEREIN.

NO WARRANTY, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY OR FITNESS OR OF ANY OTHER NATURE WITH RESPECT TO THE PRODUCT OR TO THE INFORMATION AND RECOMMENDATIONS HEREIN MADE HEREUNDER.