

# ACROS ORGANICS

## Material Safety Data Sheet

Creation Date 30-Oct-2009

Revision Date 30-Oct-2009

Revision Number 1

### 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Product Name</b>	<b>Barium chloride dihydrate</b>	
<b>Cat No.</b>	<b>AC203130000; AC203130010; AC203130025; AC203135000</b>	
<b>Synonyms</b>	No information available.	
<b>Recommended Use</b>	Laboratory chemicals	
<b>Company</b> Fisher Scientific One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100	<b>Entity / Business Name</b> Acros Organics One Reagent Lane Fair Lawn, NJ 07410	<b>Emergency Telephone Number</b> For information in the US, call: 800-ACROS-01 For information in Europe, call: +32 14 57 52 11  Emergency Number, Europe: +32 14 57 52 99 Emergency Number, US: 201-796-7100  CHEMTREC Phone Number, US: 800-424-9300 CHEMTREC Phone Number, Europe: 703-527-3887

### 2. HAZARDS IDENTIFICATION

#### WARNING!

#### Emergency Overview

Toxic if swallowed. Harmful by inhalation. May cause skin, eye, and respiratory tract irritation.

**Appearance** White

**Physical State** Solid

**odor** No information available

**Target Organs**

None known.

#### Potential Health Effects

**Acute Effects**

**Principle Routes of Exposure**

<b>Eyes</b>	May cause irritation.
<b>Skin</b>	May cause irritation. May be harmful in contact with skin.
<b>Inhalation</b>	Harmful by inhalation. May cause irritation of respiratory tract.
<b>Ingestion</b>	Toxic if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Chronic Effects** None known.

See Section 11 for additional Toxicological information.

**Aggravated Medical Conditions** No information available.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Haz/Non-haz

Component	CAS-No	Weight %
Barium Chloride dihydrate	10326-27-9	>95
Barium chloride	10361-37-2	-

### 4. FIRST AID MEASURES

<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
<b>Inhalation</b>	Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Immediate medical attention is required.
<b>Ingestion</b>	Do not induce vomiting. Call a physician or Poison Control Center immediately.
<b>Notes to Physician</b>	Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

<b>Flash Point</b>	No information available.
<b>Method</b>	No information available.
<b>Autoignition Temperature</b>	No information available.
<b>Explosion Limits</b>	
<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Suitable Extinguishing Media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Unsuitable Extinguishing Media</b>	No information available.
<b>Hazardous Combustion Products</b>	No information available.
<b>Sensitivity to mechanical impact</b>	No information available.
<b>Sensitivity to static discharge</b>	No information available.

**Specific Hazards Arising from the Chemical**

Keep product and empty container away from heat and sources of ignition

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

**NFPA**                      **Health 3**                      **Flammability 1**                      **Instability 0**                      **Physical hazards N/A**

**6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions**                      Ensure adequate ventilation. Use personal protective equipment. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. Avoid dust formation.

**Environmental Precautions**                      Should not be released into the environment.

**Methods for Containment and Clean Up**                      Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

**7. HANDLING AND STORAGE**

**Handling**                      Use only under a chemical fume hood. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Avoid dust formation. Do not breathe vapors/dust. Do not ingest.

**Storage**                      Keep containers tightly closed in a dry, cool and well-ventilated place.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Engineering Measures**                      Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.

**Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Barium chloride			IDLH: 50 mg/m <sup>3</sup> TWA: 0.5 mg/m <sup>3</sup>

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Barium chloride			TWA: 0.5 mg/m <sup>3</sup>

*NIOSH IDLH: Immediately Dangerous to Life or Health*

**Personal Protective Equipment**

**Eye/face Protection**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin and body protection**

Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection**

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Physical State**                      Solid

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White
odor	No information available
Odor Threshold	No information available.
pH	5-8 5% aq.solution
Vapor Pressure	No information available.
Vapor Density	No information available.
Viscosity	No information available.
Boiling Point/Range	1560°C / 2840°F
Melting Point/Range	962°C / 1763.6°F
Decomposition temperature	> 100°C
Flash Point	No information available.
Evaporation Rate	No information available.
Specific Gravity	No information available.
Solubility	No information available.
log Pow	No data available
Molecular Weight	244.28
Molecular Formula	Ba Cl <sub>2</sub> . 2 H <sub>2</sub> O

## 10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Conditions to Avoid	Incompatible products. Excess heat. Avoid dust formation.
Incompatible Materials	Strong oxidizing agents
Hazardous Decomposition Products	Hydrogen chloride gas
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions .	None under normal processing..

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

**Product Information** See actual entry in RTECS for complete information.

### Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Barium chloride	118 mg/kg ( Rat )	Not listed	Not listed

**Irritation** No information available.

**Toxicologically Synergistic Products** No information available.

### Chronic Toxicity

**Carcinogenicity** There are no known carcinogenic chemicals in this product

<b>Sensitization</b>	No information available.
<b>Mutagenic Effects</b>	Not mutagenic in AMES Test
<b>Reproductive Effects</b>	No information available.
<b>Developmental Effects</b>	No information available.
<b>Teratogenicity</b>	No information available.
<b>Other Adverse Effects</b>	See actual entry in RTECS for complete information.
<b>Endocrine Disruptor Information</b>	No information available

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Do not empty into drains.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Barium chloride	Not listed	Not listed	Not listed	EC50 48 h 21.9 mg/L

<b>Persistence and Degradability</b>	No information available
<b>Bioaccumulation/ Accumulation</b>	No information available
<b>Mobility</b>	No information available

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. TRANSPORT INFORMATION

### DOT

<b>UN-No</b>	UN1564
<b>Proper Shipping Name</b>	BARIUM COMPOUND, N.O.S.
<b>Hazard Class</b>	6.1
<b>Packing Group</b>	III

### TDG

<b>UN-No</b>	UN1564
<b>Proper Shipping Name</b>	BARIUM COMPOUND, N.O.S.
<b>Hazard Class</b>	6.1

**14. TRANSPORT INFORMATION**

**Packing Group** III

**IATA**

**UN-No** 1564  
**Proper Shipping Name** BARIUM COMPOUND, N.O.S.  
**Hazard Class** 6.1  
**Packing Group** III

**IMDG/IMO**

**UN-No** 1564  
**Proper Shipping Name** BARIUM COMPOUND, N.O.S.  
**Hazard Class** 6.1  
**Packing Group** III

**15. REGULATORY INFORMATION**

**International Inventories**

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	CHINA	KECL
Barium Chloride dihydrate	-	-	-	-	-		X	X	X	X	-
Barium chloride	X	X	-	233-788-1	-		X	X	X	X	KE-02037 X

**Legend:**

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

**U.S. Federal Regulations**

**TSCA 12(b)** Not applicable

**SARA 313**

Not applicable

**SARA 311/312 Hazardous Categorization**

**Acute Health Hazard**

Yes

---

<b>Chronic Health Hazard</b>	No
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

**Clean Water Act**

Not applicable

**Clean Air Act**

Not applicable

**OSHA**

Not applicable

**CERCLA**

Not Applicable

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**State Right-to-Know**

Not applicable

**U.S. Department of Transportation**

Reportable Quantity (RQ): N

DOT Marine Pollutant N

DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

**Other International Regulations****Mexico - Grade** No information available**Canada**

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.

**WHMIS Hazard Class**

D1B Toxic materials



---

**16. OTHER INFORMATION**

**Prepared By** Regulatory Affairs  
Thermo Fisher Scientific  
Tel: (412) 490-8929

**Creation Date** 30-Oct-2009

**Print Date** 30-Oct-2009

**Revision Summary** "\*\*\*\*", and red text indicates revision

**Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of MSDS**