Material Safety Data Sheet Barium perchlorate, anhydrous, 99%

ACC# 29366

Section 1 - Chemical Product and Company Identification

MSDS Name: Barium perchlorate, anhydrous, 99%

Catalog Numbers: AC221270000, AC221270050, AC221271000, AC221275000

Synonyms: Barium Perchlorate Company Identification: Acros Organics N.V. One Reagent Lane Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01 For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
13465-95-7	Barium perchlorate	99.0	236-710-4

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: white solid.

Danger! Explosive when mixed with combustible material. Strong oxidizer. Contact with other material may cause a fire. May cause severe eye, skin and respiratory tract irritation with possible burns. May be harmful if inhaled. May be harmful if swallowed. Hygroscopic (absorbs moisture from the air).

Target Organs: Heart, nerves.

Potential Health Effects

Eye: May cause severe eye irritation. May cause conjunctivitis. May cause permanent corneal opacification.

Skin: May cause severe irritation and possible burns.

Ingestion: May be harmful if swallowed. May cause burns to the gastrointestinal tract. May cause nausea, vomiting, and diarrhea, possibly with blood.

Inhalation: May cause severe irritation of the respiratory tract with possible burns. May be harmful if inhaled. May cause acute pulmonary edema, asphyxia, chemical pneumonitis, and upper airway obstruction caused by edema.

Chronic: No information found.

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Strong oxidizer. Contact with other material may cause fire. Use water with caution and in flooding amounts.

Extinguishing Media: Use agent most appropriate to extinguish fire. Contact professional fire-fighters immediately.

Flash Point: Not available.

Autoignition Temperature: Not available. **Explosion Limits, Lower:**Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 2; Flammability: 0; Instability: 1; Special Hazard: OX

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions. Remove all sources of ignition.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Keep container tightly closed. Avoid contact with clothing and other combustible materials. Do not get on skin or in eyes. Avoid ingestion and inhalation. **Storage:** Keep away from heat, sparks, and flame. Do not store near combustible materials. Store protected from moisture.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Barilim nerchiorate	0.5 mg/m3 TWA (listed under Barium).	none listed	0.5 mg/m3 TWA (listed under Barium).

OSHA Vacated PELs: Barium perchlorate: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: 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: Wear appropriate protective gloves to prevent skin exposure. **Clothing:** Wear appropriate clothing to prevent skin exposure.

Respirators: 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.

Section 9 - Physical and Chemical Properties

Physical State: Solid Appearance: white Odor: Not available. pH: Not available.

Vapor Pressure: Not available.
Vapor Density: Not available.
Evaporation Rate:Not available.
Viscosity: Not available.
Boiling Point: Not available.
Freezing/Melting Point:505 deg C
Decomposition Temperature: Not available.

Decomposition Temperature:Not available.

Solubility: soluble

Specific Gravity/Density:3.2000g/cm3

Molecular Formula:BaCl208 Molecular Weight:336.23

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, ignition sources, dust generation, combustible materials, reducing agents, exposure to

moist air or water.

Incompatibilities with Other Materials: Reducing agents, moisture. **Hazardous Decomposition Products:** Hydrogen chloride, barium oxide.

Hazardous Polymerization: Has not been reported

Section 11 - Toxicological Information

RTECS#:

CAS# 13465-95-7: SC7550000

LD50/LC50: Not available.

Carcinogenicity:

CAS# 13465-95-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information found Teratogenicity: No information found Reproductive Effects: No information found Mutagenicity: No information found Neurotoxicity: No information found

Other Studies:

Ecotoxicity: No data available. No information available.

Environmental: No information found. **Physical:** No information found. **Other:** No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed. RCRA U-Series: None listed.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	BARIUM PERCHLORATE	BARIUM PERCHLORATE
Hazard Class:	5.1	5.1(6.1)
UN Number:	UN1447	UN1447
Packing Group:	II	II

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 13465-95-7 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

Section 313

This material contains Barium perchlorate (listed as Barium), 99.0%, (CAS# 13465-95-7) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 13465-95-7 can be found on the following state right to know lists: New Jersey, Pennsylvania, (listed as Barium), Pennsylvania, (listed as Barium compounds, n.o.s.), Massachusetts, (listed as Barium).

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

XN O

Risk Phrases:

R 20/22 Harmful by inhalation and if swallowed.

R 9 Explosive when mixed with combustible material.

Safety Phrases:

S 27 Take off immediately all contaminated clothing.

WGK (Water Danger/Protection)

CAS# 13465-95-7: 1

Canada - DSL/NDSL

CAS# 13465-95-7 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of C, D1A.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 13465-95-7 is not listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 9/02/1997 **Revision #6 Date:** 10/03/2005

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.