

# Material Safety Data Sheet

## Bismuth Subnitrate

ACC# 92072

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Bismuth Subnitrate

**Catalog Numbers:** AC611355000

**Synonyms:** Bismuth hydroxide nitrate oxide; Basic bismuth nitrate

**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
1304-85-4	Bismuth Subnitrate	90-100.0	215-136-8

**Hazard Symbols:** O

**Risk Phrases:** 36/38 8

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: white powder. **Danger!** Strong oxidizer. Contact with other material may cause a fire. May cause irritation. May cause kidney damage. May cause methemoglobinemia. May cause cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood).

**Target Organs:** Blood, kidneys.

#### Potential Health Effects

**Eye:** May cause mild eye irritation.

**Skin:** No information regarding skin irritation and other potential effects was found.

**Ingestion:** May cause methemoglobinemia, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), convulsions, and death. May cause kidney failure. May cause visual changes with blurred vision. Opacities may form in the cornea.

**Inhalation:** May cause effects similar to those described for ingestion.

**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 if irritation develops or persists. Flush skin with plenty of soap and water.

**Ingestion:** Call a poison control center. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

**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.

### 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 combustible materials may cause a fire.

**Extinguishing Media:** Use water spray to cool fire-exposed containers. Use flooding quantities of water as spray.

**Flash Point:** Not available.

**Autoignition Temperature:** Not available.

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

**Upper:** Not available.

**NFPA Rating:** Not published.

### Section 6 - Accidental Release Measures

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

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container.

### Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with skin and eyes. Avoid contact with clothing and other combustible materials. Avoid ingestion and inhalation.

**Storage:** Do not store near combustible materials. Store in a cool, dry place.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use adequate ventilation to keep airborne concentrations low.

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Bismuth Subnitrate	none listed	none listed	none listed

**OSHA Vacated PELs:** Bismuth Subnitrate: 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 protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

## Section 9 - Physical and Chemical Properties

**Physical State:** Powder

**Appearance:** white

**Odor:** odorless

**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:** Not available.

**Decomposition Temperature:** Not available.

**Solubility:** Negligible.

**Specific Gravity/Density:** 4.93

**Molecular Formula:** Bi5O(OH)9(NO3)4

**Molecular Weight:** 1461.9966

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable at room temperature in closed containers under normal storage and handling conditions.

**Conditions to Avoid:** Combustible materials.

**Incompatibilities with Other Materials:** Flammable and combustible materials, organic substances.

**Hazardous Decomposition Products:** Nitrogen oxides.

**Hazardous Polymerization:** Has not been reported

## Section 11 - Toxicological Information

### RTECS#:

**CAS#** 1304-85-4: EB2977000

### LD50/LC50:

Not available.

### Carcinogenicity:

CAS# 1304-85-4: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

**Epidemiology:** No data available.

**Teratogenicity:** No data available.

**Reproductive Effects:** No data available.

**Neurotoxicity:** No data available.

**Mutagenicity:** No data available.

**Other Studies:** No data available.

## Section 12 - Ecological Information

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	IATA	RID/ADR	IMO	Canada TDG
<b>Shipping Name:</b>	NITRATES, INORGANIC, N.O.S.				No information available.
<b>Hazard Class:</b>	5.1				
<b>UN Number:</b>	UN1477				
<b>Packing Group:</b>	II				

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 1304-85-4 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.

#### SARA

#### 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

No chemicals are reportable under Section 313.

#### Clean Air Act:

This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

#### 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# 1304-85-4 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

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:

O

#### Risk Phrases:

R 36/38 Irritating to eyes and skin.

R 8 Contact with combustible material may cause fire.

#### Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 28 After contact with skin, wash immediately with...

#### WGK (Water Danger/Protection)

CAS# 1304-85-4: No information available.

#### Canada - DSL/NDSL

CAS# 1304-85-4 is listed on Canada's DSL List.

#### Canada - WHMIS

WHMIS: Not available.

#### Canadian Ingredient Disclosure List

#### Exposure Limits

## Section 16 - Additional Information

**MSDS Creation Date:** 11/08/2001

**Revision #2 Date:** 12/03/2002

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

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