

# Material Safety Data Sheet

## Borane-tert.-butylamine complex, pellet

ACC# 95212

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Borane-tert.-butylamine complex, pellet

**Catalog Numbers:** AC189220000, AC189220250, AC189221000

**Synonyms:** tert-Butylamineborane

**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
7337-45-3	Borane-tert-butylamine complex, pellets	100 %	230-851-5

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: white solid.

**Danger!** May be fatal if swallowed. Flammable solid. Water-reactive. Causes eye and skin irritation. May cause respiratory and digestive tract irritation. May cause central nervous system effects. Heat sensitive. The toxicological properties of this material have not been fully investigated.

**Target Organs:** Central nervous system.

#### Potential Health Effects

**Eye:** Causes eye irritation.

**Skin:** Causes skin irritation.

**Ingestion:** May be fatal if swallowed. May cause irritation of the digestive tract. The toxicological properties of this substance have not been fully investigated.

**Inhalation:** Inhalation of dust may cause respiratory tract irritation.

**Chronic:** No information found.

### Section 4 - First Aid Measures

**Eyes:** Immediately 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. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

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

**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. Dusts at sufficient concentrations can form explosive mixtures with air. Water Reactive. Material will react with water and may release a flammable and/or toxic gas. Flammable solid. Liberates flammable gas when dry or in solution.

**Extinguishing Media:** DO NOT USE WATER OR FOAM. For small fires, use dry chemical, soda ash, lime or sand. For large fires, use dry sand, dry chemical, soda ash or lime or withdraw from area and let fire burn.

**Flash Point:** Not applicable.

**Autoignition Temperature:** 177 deg C ( 350.60 deg F)

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

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 3; Flammability: 1; Instability: 1; Special Hazard: -W-

### Section 6 - Accidental Release Measures

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

**Spills/Leaks:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Remove all sources of

ignition. Provide ventilation. Do not get water on spilled substances or inside containers. Use water spray to reduce vapors, do not put water directly on leak, spill area or inside container.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Wash hands before eating. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Do not ingest or inhale. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

**Storage:** Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Material can ignite if dry. Do not allow material to completely dry. Keep under a nitrogen blanket. Store in a cool, dry, well-ventilated area away from incompatible substances.

## 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
Borane-tert-butylamine complex, pellets	none listed	none listed	none listed

**OSHA Vacated PELs:** Borane-tert-butylamine complex, pellets: 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. 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:** 98 deg C dec

**Decomposition Temperature:** 71 deg C

**Solubility:** 2.7 G/100ML (20°C)

**Specific Gravity/Density:** Not available.

**Molecular Formula:** C<sub>4</sub>H<sub>14</sub>BN

**Molecular Weight:** 86.97

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable. However, may decompose if heated.

**Conditions to Avoid:** High temperatures, incompatible materials, contact with water, temperatures above 65°C.

**Incompatibilities with Other Materials:** Strong oxidizing agents and strong acids, water.

**Hazardous Decomposition Products:** Nitrogen oxides, carbon monoxide, carbon dioxide, oxides of boron, borane, hydrogen gas.

**Hazardous Polymerization:** Will not occur.

## Section 11 - Toxicological Information

**RTECS#:**

**CAS#** 7337-45-3: E03900000

**LD50/LC50:**

CAS# 7337-45-3:

Dermal, guinea pig: LD50 = >1 gm/kg;

Oral, mouse: LD50 = 25 mg/kg;

Oral, rat: LD50 = 96 mg/kg;

Skin, rabbit: LD50 = 820 mg/kg;

Oral, Rat: LD50 = 25

**Carcinogenicity:**

CAS# 7337-45-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No data available.

**Teratogenicity:** No data available.  
**Reproductive Effects:** No data available.  
**Mutagenicity:** No data available.  
**Neurotoxicity:** No data available.  
**Other Studies:**

## 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	Canada TDG
<b>Shipping Name:</b>	TOXIC SOLIDS, ORGANIC, N.O.S.	No information available.
<b>Hazard Class:</b>	6.1	
<b>UN Number:</b>	UN2811	
<b>Packing Group:</b>	III	

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 7337-45-3 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

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# 7337-45-3 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

### 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:

XI T F+

#### Risk Phrases:

R 1 Explosive when dry.

R 14 Reacts violently with water.

R 15 Contact with water liberates extremely flammable gases.

R 25 Toxic if swallowed.

R 36/38 Irritating to eyes and skin.

#### Safety Phrases:

S 36/37 Wear suitable protective clothing and gloves.

### WGK (Water Danger/Protection)

CAS# 7337-45-3: No information available.

**Canada - DSL/NDSL**

CAS# 7337-45-3 is listed on Canada's DSL List.

**Canada - WHMIS**

WHMIS: Not available.

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**

Section 16 - Additional Information
-------------------------------------

**MSDS Creation Date:** 5/14/1998

**Revision #3 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.*