# Material Safety Data Sheet Sodium triacetoxyborohydride

ACC# 56516

## Section 1 - Chemical Product and Company Identification

MSDS Name: Sodium triacetoxyborohydride

Catalog Numbers: AC291820000, AC291820250, AC291821000

Synonyms: None.
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
56553-60-7	Sodium triacetoxyborohydride	97	unlisted

## Section 3 - Hazards Identification

#### **EMERGENCY OVERVIEW**

Appearance: white powder.

**Danger!** Water-reactive. Causes eye and skin burns. Contact with water or steam may cause a fire/explosion hazard. Liberates flammable hydrogen gas. May cause severe respiratory tract irritation with possible burns. May cause severe digestive tract irritation with possible burns.

Target Organs: Eyes, skin, mucous membranes.

#### **Potential Health Effects**

**Eye:** Causes eye burns. **Skin:** Causes skin burns.

Ingestion: Causes gastrointestinal tract burns.

**Inhalation:** Causes chemical burns to the respiratory tract.

Chronic: Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion.

## 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 imme diately. Do NOT allow victim to rub eyes or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes). **Skin:** Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Destroy contaminated shoes.

**Ingestion:** Do not induce vomiting. 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 breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

**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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Reacts with water to form explosive hydrogen gas.

**Extinguishing Media:** Do NOT use halogenated agents. Use approved class D extinguishing agents or smother with dry sand, clay, or sodium bicarbonate. Do NOT use water, carbon dioxide, or foam.

Flash Point: Not available.

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

Upper: Not available.

NFPA Rating: (estimated) Health: 3; Flammability: 1; Instability: 2; Special Hazard: -W-

#### 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. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Provide ventilation. Do not expose spill to water. Use

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Keep away from heat, sparks and flame. Discard contaminated shoes. Product evolves acetic acid when exposed to water or humid air.

**Storage:** Keep away from sources of ignition. Keep container closed when not in use. Store in a tightly closed container. Water free area.

## 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 adequate ventilation to keep airborne concentrations low.

#### **Exposure Limits**

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Sodium triacetoxyborohydride	none listed	none listed	none listed

OSHA Vacated PELs: Sodium triacetoxyborohydride: 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: Powder 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:114 - 118 deg C(dec) Decomposition Temperature:114 - 118 deg C

Solubility: reacts

Specific Gravity/Density:Not available. Molecular Formula:C6H10BNaO6 Molecular Weight:211.94

## Section 10 - Stability and Reactivity

Chemical Stability: Water contact produces hydrogen gas.

Conditions to Avoid: High temperatures, ignition sources, contact with water, excess heat.

Incompatibilities with Other Materials: Water, strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, oxides of boron, acetic acid, hydrogen gas.

Hazardous Polymerization: Has not been reported.

## Section 11 - Toxicological Information

RTECS#:

CAS# 56553-60-7 unlisted.

LD50/LC50: Not available.

Carcinogenicity:

CAS# 56553-60-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information available.
Teratogenicity: No information available.
Reproductive Effects: No information available.
Mutagenicity: No information available.
Neurotoxicity: No information 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	
Shipping Name:	WATER-REACTIVE SOLID, CORROSIVE, N.O.S.	WATER-REACTIVE SOLID, CORROSIVE, N.O.S. (Sodium triacetoxyborohydride)	
Hazard Class:	4.3	4.3	
UN Number:	UN3131	UN3131	
Packing Group:	II	II	

## Section 15 - Regulatory Information

## **US FEDERAL**

#### TSCA

CAS# 56553-60-7 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

CAS# 56553-60-7: Section 5 (PMN P-00-0922)

#### **TSCA Significant New Use Rule**

CAS# 56553-60-7: This product is for research and development use only. It is subject to a SNUR which has specific requirements and restrictions. The specific citation for this product is 40CFR citation 721.1880.

## **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 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# 56553-60-7 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:** 

#### F C

## **Risk Phrases:**

R 14/15 Reacts violently with water liberating extremely flammable gases.

R 34 Causes burns.

## **Safety Phrases:**

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

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 7/8 Keep container tightly closed and dry.

#### WGK (Water Danger/Protection)

CAS# 56553-60-7: No information available.

Canada - DSL/NDSL

CAS# 56553-60-7 is listed on Canada's NDSL List.

#### Canada - WHMIS

This product has a WHMIS classification of B6, E.

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: 2/03/1999 Revision #4 Date: 7/12/2005

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.