

1: Identification of substance / mixture

1. Product Identifier

Substance

Product Name **Sodium triacetoxymborohydride**
Product Code IL-STAB
CAS Number 56553-60-7
Other Names
IUPAC
MFCD Number MFCD00012211
EC/EINECS 611-401-0
REACH Number Index-No

2. Relevant identified uses of the substance or mixture and uses advised against

Research and Development

3. Details of the supplier of the safety data sheet

ISOMERLAB D.O.O.
TRZASKA CESTA
297A
SI-1000 LJUBLJANA
SLOVENIA



Telephone: +38640764332
Fax:
Email: INFO@ISOMERLAB.COM

4. Emergency telephone number

112

EUH014		
H228	Flam. Sol. 2	
H261	Water-react. 2	
H315	Skin Irrit. 2	
H318	Eye Dam. 1	
H335	STOT SE 3	
H360FD	Repr. 1B	

2. Label elements

Signal Word **Danger**



Hazard Statements

EUH014	Reacts violently with water.
H228	Flammable solid.
H261	In contact with water releases flammable gases.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H360FD	May damage fertility. May damage the unborn child.

Precautionary Phrases

P202	Do not handle until all safety precautions have been read and understood.
P223	Keep away from any possible contact with water, because of violent reaction and possible flash fire.
P231 + P232	Handle under inert gas. Protect from moisture.

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501	Dispose of contents/container to local regulations

3. Other Hazards

Additional precautionary phrases are located throughout the safety data sheet

3. Composition / Information on Ingredients

1. Substances

Product Name	Hazards	Concentration
Sodium triacetoxyborohydride		
CAS Number: 56553-60-7 EC/EINECS: 611-401-0	EUH014, H228, H261, H315, H318, H335, H360FD Eye Dam. 1, Flam. Sol. 2, Repr. 1B, Skin Irrit. 2, STOT SE 3, Water-react. 2	<=100%

4. First Aid Measures

1. Description of first aid measures

<i>Skin Contact</i>	P332 + P313: If skin irritation occurs: Get medical advice/attention. P335 + P334: Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages. Wash immediately with plenty of soap and water. Transfer to hospital if there are burns or symptoms of poisoning.
<i>Eye Contact</i>	P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Rinse opened eye for several minutes under running water. Transfer to hospital for specialist examination.
<i>Ingestion</i>	Wash out mouth with water. Transfer to hospital as soon as possible.
<i>Inhalation</i>	Transfer to hospital as soon as possible. Supply fresh air; consult a doctor in case of complaints.

2. Most important symptoms and effects

There may be pain and redness.

3. Indication of any immediate medical attention

No additional measures required

5. Firefighting measures

1. Extinguishing Media

<i>Suitable</i>	P370 + P378: In case of fire: Use sand, CO2 or powdered extinguishing agent for extinction.
<i>Unsuitable</i>	Do not use water.

2. Special Hazards arising from the substance or mixture

In combustion toxic fumes may form.

3. Advice for Fire Fighters

Wear self-contained breathing apparatus.
 Wear protective clothing to prevent contact with skin and eyes.

6. Accidental Release Measures

1. Personal Precautions

Refer to section 8 of SDS for personal protection details.
 Eliminate all sources of ignition.
 Do not attempt to take action without suitable protective clothing – see section 8 of SDS.

2. Environmental Precautions

Do not discharge into drains or rivers.
Contain the spillage using bunding.

3. Methods & Materials

Absorb into dry earth or sand.
Transfer to a closable, labelled salvage container for disposal by an appropriate method.

4. Preventing the occurrence of secondary hazards.

No Special Measures Required

7. Handling and Storage

1. Personal Precautions

<i>Safe Handling</i>	Ensure there is sufficient ventilation of the area. P240: Ground/bond container and receiving equipment. P264: Wash hands thoroughly after handling.
<i>Protection against explosions and fires</i>	P202: Do not handle until all safety precautions have been read and understood. P223: Keep away from any possible contact with water, because of violent reaction and possible flash fire. P362: Take off contaminated clothing and wash before reuse. Normal measures for preventive fire protection.

2. Conditions for safe storage, including any incompatibilities

<i>Managing Storage Risks</i>	Store in cool, well ventilated area. Keep away from sources of ignition. Keep container tightly closed. Keep away from direct sunlight. Store under inert gas.
<i>Storage Controls</i>	P402 + P404: Store in a dry place. Store in a closed container. No special requirements
<i>Maintaining Integrity</i>	P210: Keep away from heat/sparks/open flames/hot surfaces. – No smoking. P231 + P232: Handle under inert gas. Protect from moisture.
<i>Other advice</i>	no further information available

3. Specific End Uses

The end use(s) have not been fully determined. The substance is supplied for Research and Development purposes by professionals only.

8. Exposure Controls/Personal Protection

1. Control Parameters

No Data Available

2. Exposure Controls

<i>General protective and hygiene measures</i>	P280: Wear protective gloves/protective clothing/eye protection/face protection. P281: Use personal protective equipment as required. Wash hands during breaks and at the end of handling the material
<i>Engineering measures</i>	Ensure lighting and electrical equipment are not a source of ignition.
<i>Eye / Face Protection</i>	Safety Glasses with side-shields.
<i>Hand protection</i>	Protective gloves. Nitrile Rubber of 0.11mm Thickness or greater
<i>Respiratory protection</i>	Use breathing protection with high concentrations
<i>Skin protection</i>	Handle with gloves. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practice. Wash and dry hands. Protective clothing.
<i>Other personal protection advice</i>	no data

9. Physical and Chemical Properties

1. Physical and Chemical Properties

Appearance	Solid
Odour	No Data Available
Odour threshold	No Data Available
PH	No Data Available
Melting point / Freezing point	116-120°C (dec.)
Initial boiling point and boiling range	No Data Available
Flash point	No Data Available
Evaporation rate	No Data Available
Flammability(solid,gas)	No Data Available
Upper/lower flammability or explosive limits	No Data Available
Vapour pressure	No Data Available
Vapour density	No Data Available
Relative density	1.43
Solubility(ies):	No Data Available
Partition coefficient: n-octanol/water	No Data Available
Auto-ignition temperature	360°C
Decomposition temperature	No Data Available
Viscosity	No Data Available
Explosive properties	No Data Available
Oxidising properties	No Data Available

2. Other Information

Moisture sensitive
Air sensitive

10. Stability and Reactivity

1. Reactivity

Reacts violently with water

2. Stability

Stable under normal conditions.
Moisture sensitive.

3. Possibility of Hazardous Reactions

Reacts violently with water

4. Conditions to Avoid

Moist Air.
Extremes of temperature and direct sunlight
Heat, flames and sparks.

5. Incompatible Materials

Oxidising agents.
Water.
Alcohols.
Acids.

6. Hazardous Decomposition Products

In combustion emits toxic fumes.
In combustion emits toxic fumes of carbon dioxide / carbon monoxide.
In combustion emits toxic fumes of boron oxides.
In combustion emits toxic fumes of nitrogen oxides.

11. Toxicology information

1. Information

<i>Acute Toxicity</i>	Oral LD50 (rat - male and female) >2,000mg/kg
<i>Skin corrosion/irritation</i>	irritant for skin and mucous membranes
<i>Serious eye Damage/irritation</i>	irritant effect
<i>Respiratory or skin sensitisation</i>	No sensitizing effect known
<i>Germ Cell mutagenicity</i>	not known
<i>Carcinogenicity</i>	not known
<i>Reproductive toxicity</i>	not known
<i>STOT-single exposure</i>	not known
<i>STOT-repeated exposure</i>	not known
<i>Aspiration hazard</i>	not known

2. Additional

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.
No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH

12. Ecological Information

1. Toxicity

not known

2. Persistence and degradability

not known

3. Bio-Accumulative Potential

not known

4. Mobility and Soil

not known

5. Results of PBT & vPvB assessment

not known

6. Other adverse effects

Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.

13. Disposal Considerations

1. Waste Treatment Methods

Disposal Operations

Disposal of Packaging Disposal must be made according to official regulations.

14. Transport Information

Air (ICAO)

1. **UN Number:** 1409
2. **Shipping Name:** Metal hydrides, water-reactive, n.o.s.
3. **Transport hazard class(es):** : 4.3 Sub Class :



4. **Packing group:** II
5. **Environmental hazards:**
6. **Special Precautions for user:**
7. **Transport in bulk:**

Road (ADR)

1. **UN Number:** 1409
2. **Shipping Name:** METAL HYDRIDES, WATER-REACTIVE, N.O.S (Sodium triacetoxymethylborohydride).
3. **Transport hazard class(es):** : 4 Sub Class :



4. **Packing group:** II
5. **Environmental hazards:**
6. **Special Precautions for user:**
7. **Transport in bulk:**

Sea (IMDG)

1. **UN Number:** 1409
2. **Shipping Name:** Metal hydrides, water-reactive, n.o.s.
3. **Transport hazard class(es):** : 4.3 Sub Class :



4. **Packing group:** II
5. **Environmental hazards:**
6. **Special Precautions for user:**
7. **Transport in bulk:** IBCINS: IBC04

TANKPROV: TP33

15. Safety, health, environmental and national regulations

1. Safety, health, environmental and national regulations:

product is not subject to any additional regulations or provisions

2. Safety Assessment

No Chemical Safety Assessment

16. Other Information

1. Other Information:

ADR: Accord Europeen sur le transport des marchandises Dangereuses par Route(European Agreement concerning the International Carriage of Dangerous Goods by road)
RID:Reglement International concernant le transport des marchandises dangereuses par chemin de fer (Regulations concerning the International transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the International Air Transport Association
ICAO:International Civil Aviation Organization
ICAO-TI: Technical Instructions by the ICAO
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
CAS:Chemical Abstracts Service

3. Disclaimer

The product listed is for research and development purposes only and not for human or animal use. As such, in most cases, the toxicological, ecological and physicochemical properties have not been fully determined and the product should be treated with respect and always handled under suitable conditions by appropriately qualified personnel. The responsible party shall use this datasheet only in conjunction with other sources of information gathered by them, and should make an independent judgement of suitability, to ensure proper use and protect the health and safety of employees. This information is furnished without warranty and any use of the product not in conformance with this material safety data sheet, or in combination with any other product or process, is the responsibility of the user.