SODIUM TRIACETOXY BOROHYDRIDE FOR SYNTHESIS MSDS

CAS No: 56553-60-7 MSDS



MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Substance

Trade name : Sodium triacetoxy borohydride

CAS No : 56553-60-7
Product code : 6053K

Chemical structure

H₃C O O CH₃

Synonyms : STAB

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

LOBA CHEMIE PVT.LTD.

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400005 Mumbai - INDIA
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info@lobachemie.com - www.lobachemie.com

1.4. Emergency telephone number

Emergency number : + 91 22 6663 6663 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable solids, H228 Category 1

Substances and Mixtures H261

which, in contact with water, emit flammable gases, Category 2

Skin corrosion/irritation, H315

Category 2

Specific target organ H335

toxicity — Single

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exposure, Category 3, Respiratory tract irritation

Full text of classification categories and H statements : see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

F; R14

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02

GHS07

Signal word (CLP) : Danger

Hazard statements (CLP) : H228 - Flammable solid

H261 - In contact with water releases flammable gases

H315 - Causes skin irritation

H335 - May cause respiratory irritation

Precautionary statements (CLP) : P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

P231+P232 - Handle under inert gas. Protect from moisture P261 - Avoid breathing dust/fume/gas/mist/vapours/spray

EUH phrases : EUH014 - Reacts violently with water

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Name : SODIUM TRIACETOXY BOROHYDRIDE For Synthesis

CAS No : 56553-60-7

Full text of R- and H-phrases: see section 16

3.2. Mixture

Not applicable

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SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Give oxygen or

artificial respiration if necessary. If you feel unwell, seek medical advice.

First-aid measures after skin contact : Take off contaminated clothing. Gently wash with plenty of soap and water. If skin

irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously

with water for several minutes. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth out with water. If you feel unwell, seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May cause respiratory irritation.

Symptoms/injuries after skin contact : Causes skin irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Dry powder.

Unsuitable extinguishing media : Do not use extinguishing media containing water.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable solid.

Reactivity in case of fire : Reacts slowly with water (moisture): release of (highly) toxic gases/vapours.

5.3. Advice for firefighters

Precautionary measures fire : Keep away from any possible contact with water, because of violent reaction and

possible flash fire.

Firefighting instructions : Do not allow water to enter the vessels, a violent reaction may occur . Do not fight

fire when fire reaches explosives.

Protection during firefighting : Do not attempt to take action without suitable protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Do not allow water (or moist air) contact with this material.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Large spills: scoop solid spill into closing containers. Minimize generation of dust.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Do not breathe dust.

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Hygiene measures

: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Store in dry protected location to prevent any moisture contact. Store in original container. Store in a dry place.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Hand protection : protective gloves

Eye protection : Chemical goggles or safety glasses

Skin and body protection : Wear suitable protective clothing

Respiratory protection : Wear respiratory protection

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Colour : White powder.

Odour : No data available

Odour threshold : No data available

pH : No data available

Relative evaporation rate (butylacetate=1) : No data available

Melting point : 116 - 120 °C

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapour pressure : No data available

Relative vapour density at 20 °C : No data available

Relative density : No data available

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Density : 1.43 g/cm³ at 20.5 °C

Solubility : Water: Decomposes in contact with water.

Log Pow : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

Explosive properties : No data available

Oxidising properties : No data available

Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Could react violently or explosively on contact with water.

10.2. Chemical stability

Flammable solid.

10.3. Possibility of hazardous reactions

Highly reactive material. Reacts violently with water.

10.4. Conditions to avoid

Moisture.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single

exposure)

: May cause respiratory irritation.

Specific target organ toxicity (repeated

exposure)

: Not classified

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Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Additional information : Do not allow water (or moist air) contact with this material.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : 1409 UN-No. (IMDG) : 1409 UN-No.(IATA) : 1409 UN-No.(ADN) : 1409 UN-No. (RID) : 1409

14.2. UN proper shipping name

Proper Shipping Name (ADR) : METAL HYDRIDES, WATER-REACTIVE, N.O.S.
Proper Shipping Name (IMDG) : METAL HYDRIDES, WATER-REACTIVE, N.O.S.
Proper Shipping Name (IATA) : METAL HYDRIDES, WATER-REACTIVE, N.O.S.
Proper Shipping Name (ADN) : METAL HYDRIDES, WATER-REACTIVE, N.O.S.
Proper Shipping Name (RID) : METAL HYDRIDES, WATER-REACTIVE, N.O.S.

Transport document description (ADR) : UN 1409 METAL HYDRIDES, WATER-REACTIVE, N.O.S., 4.3, II, (D/E) Transport document description (IMDG) : UN 1409 METAL HYDRIDES, WATER-REACTIVE, N.O.S., 4.3, II

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Transport document description (IATA) : UN 1409 METAL HYDRIDES, WATER-REACTIVE, N.O.S., 4.3, II
Transport document description (RID) : UN 1409 METAL HYDRIDES, WATER-REACTIVE, N.O.S., 4.3, II
: UN 1409 METAL HYDRIDES, WATER-REACTIVE, N.O.S., 4.3, II

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 4.3 Danger labels (ADR) : 4.3



IMDG

Transport hazard class(es) (IMDG) : 4.3 Danger labels (IMDG) : 4.3



IATA

Transport hazard class(es) (IATA) : 4.3 Hazard labels (IATA) : 4.3



ADN

Transport hazard class(es) (ADN) : 4.3 Danger labels (ADN) : 4.3



RID

Transport hazard class(es) (RID) : 4.3 Danger labels (RID) : 4.3



14.4. Packing group

Packing group (ADR) : II
Packing group (IMDG) : II

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Packing group (IATA) : II
Packing group (ADN) : II
Packing group (RID) : II

14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

: TP33

: CV23

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : W2
Special provision (ADR) : 274, 508
Limited quantities (ADR) : 500g
Excepted quantities (ADR) : E2

Packing instructions (ADR) : P410, IBC04

Mixed packing provisions (ADR) : MP14
Portable tank and bulk container : T3

instructions (ADR)

Portable tank and bulk container special

provisions (ADR)

Tank code (ADR) : SGAN

Vehicle for tank carriage : AT

Transport category (ADR) : 2

Special provisions for carriage - Packages : V1

(ADR)

Special provisions for carriage - Loading,

unloading and handling (ADR)

Hazard identification number (Kemler No.) : 423

Orange plates

423 1409

Tunnel restriction code (ADR) : D/E EAC code : 4W

- Transport by sea

Special provision (IMDG) : 274 Limited quantities (IMDG) : 500 g Excepted quantities (IMDG) : E2 Packing instructions (IMDG) : P410 : PP40 Packing provisions (IMDG) IBC packing instructions (IMDG) : IBC04 Tank instructions (IMDG) : T3 Tank special provisions (IMDG) : TP33 : F-G EmS-No. (Fire) EmS-No. (Spillage) : S-L Stowage category (IMDG) : D Stowage and handling (IMDG) : H1

Segregation (IMDG) : SG35, SG26

MFAG-No : 138

- Air transport

PCA Excepted quantities (IATA) : E2

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PCA Limited quantities (IATA) : Y475 PCA limited quantity max net quantity : 5kg

(IATA)

PCA packing instructions (IATA) : 484
PCA max net quantity (IATA) : 15kg
CAO packing instructions (IATA) : 490
CAO max net quantity (IATA) : 50kg
ERG code (IATA) : 4W

- Inland waterway transport

Classification code (ADN) : W2

Special provisions (ADN) : 274, 508

Limited quantities (ADN) : 500 g

Excepted quantities (ADN) : E2

Equipment required (ADN) : PP, EX, A

Ventilation (ADN) : VE01

Provisions for handling and stowage of the : HA08

cargo (ADN)

Number of blue cones/lights (ADN) : 0

- Rail transport

Classification code (RID) : W2
Special provision (RID) : 274, 508
Limited quantities (RID) : 500g
Excepted quantities (RID) : E2

Packing instructions (RID) : P410, IBC04

Mixed packing provisions (RID) : MP14

Portable tank and bulk container : T3

instructions (RID)

Portable tank and bulk container special : TP33

provisions (RID)

Tank codes for RID tanks (RID) : SGAN
Transport category (RID) : 2
Special provisions for carriage – Packages : W1

(RID)

Special provisions for carriage – Loading

and unloading (RID)

: CW23

Colis express (express parcels) (RID) : CE10 Hazard identification number (RID) : 423

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Sodium triacetoxy borohydride is not on the REACH Candidate List Sodium triacetoxy borohydride is not on the REACH Annex XIV List

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15.1.2. National regulations

Germany

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV

12th Ordinance Implementing the Federal : Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

Denmark

Recommendations Danish Regulation

: Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of R-, H- and EUH-phrases:

Flam. Sol. 1	Flammable solids, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
Water-react. 2	Substances and Mixtures which, in contact with water, emit flammable gases, Category 2
H228	Flammable solid
H261	In contact with water releases flammable gases
H315	Causes skin irritation
H335	May cause respiratory irritation
EUH014	Reacts violently with water
R14	Reacts violently with water
F	Highly flammable

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

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