

Material Safety Data Sheet

Supplier

TCI America

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In case of Emergency Call

Chemtrec®

(800) 424-9300 (U.S.)

(703) 527-3887 (International)

Bis(trimethylaluminum)-1,4-diazabicyclo[2.2.2]octane

Revision 4 number:

Revision date: 02/02/2012

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SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product name: Bis(trimethylaluminum)-1,4-diazabicyclo[2.2.2]octane Adduct

Product code: B3583

Company: TOKYO CHEMICAL INDUSTRY CO., LTD.

Address: 4-10-2, Nihonbashi-honcho, Chuo-ku, Tokyo 103-0023, Japan

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Revision number: 4

2. HAZARDS IDENTIFICATION

Classification of the GHS PHYSICAL HAZARDS

Substances and mixtures which, in contact with Category 1

water, emit flammable gases

HEALTH HAZARDS

Acute toxicity (Oral)
Skin corrosion/irritation
Serious eye damage/eye irritation
ENVIRONMENTAL HAZARDS
Category 2
Category 2A
Not classified

GHS label elements

Pictograms or hazard symbols





Signal word

Hazard statement In contact with water releases flammable gases which may

Danger

ignite spontaneously Harmful if swallowed Causes skin irritation

Causes serious eye irritation

Precautionary statements

[Prevention] Keep away from any possible contact with water, because of violent reaction and

possible flash fire.

Handle under inert gas. Protect from moisture. Do not eat, drink or smoke when using this product.

Wash hands thoroughly after handling.

Wear protective gloves/eye protection/face protection.

[Response] IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Rinse mouth.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention. IF ON SKIN: Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

In case of fire: Do not use water for extinction.

[Storage] Store in a dry place. Store in a closed container.

INDUSTRY CO., LTD.

Revision number: 4

2. HAZARDS IDENTIFICATION

[Disposal] Dispose of contents/container through a waste management company authorized by

the local government.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Substance

Compontent(s): Bis(trimethylaluminum)-1,4-diazabicyclo[2.2.2]octane Adduct

Percent: >98.0%(T) 137203-34-0 **CAS Number:** Synonyms: DABAL-Me3 **Chemical Formula:** $C_{12}H_{30}AI_2N_2$

Notice Through Official Gazettes Reference Number

ENCS: Not Listed

4. FIRST-AID MEASURES

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Inhalation:

Get medical advice/attention if you feel unwell.

Skin contact: Remove/Take off immediately all contaminated clothing. Gently wash with plenty of

soap and water. If skin irritation or rash occurs: Get medical advice/attention.

Rinse cautiously with water for several minutes. Remove contact lenses, if present Eye contact:

and easy to do. Continue rinsing. If eye irritation persists: Get medical

advice/attention.

Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Ingestion:

Protection of first-aiders: A rescuer should wear personal protective equipment, such as rubber gloves and air-

tight goggles.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing

media:

Dry chemical, dry sand.

Extinguishing media not to Water be used:

Specific hazards: Take care as it may decompose upon combustion or in high temperatures to

generate poisonous fume.

Specific methods: Fire-extinguishing work is done from the windward and the suitable fire-extinguishing

method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Remove movable

containers if safe to do so.

When extinguishing fire, be sure to wear personal protective equipment. Special protective

equipment for firefighters:

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, Use personal protective equipment. Keep people away from and upwind of spill/leak. protective equipment and

Entry to non-involved personnel should be controlled around the leakage area by

emergency procedures: roping off, etc.

Environmental precautions: Prevent product from entering drains.

Methods and materials for containment and cleaning up:

Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

Prevention of secondary

hazards:

Do not allow contact with water. Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use spark-proof tools and explosion-

proof equipment. Since there is a possibility of igniting behind when removal of a leakage thing is imperfect, it is careful enough.

7. HANDLING AND STORAGE

Handling

Technical measures: Handling is performed in a well ventilated place. Wear suitable protective equipment.

Prevent dispersion of dust. Wash hands and face thoroughly after handling.

Use a local exhaust if dust or aerosol will be generated.

Adduct

7. HANDLING AND STORAGE

Advice on safe handling: Avoid contact with skin, eves and clothing.

Keep away from any possible contact with water, because of violent reaction and

possible flash fire.

Use well-dried equipment. Handle under inert gas.

Don't leave used equipment or rag. This product may ignite if it is left stuck on

combustibles such as paper, rags, etc.

Storage

Storage conditions: Keep container tightly closed. Store in a cool and dark place.

> Store under inert gas. Protect from moisture.

Store away from incompatible materials such as oxidizing agents.

Packaging material: Law is followed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Install a closed system or local exhaust as possible so that workers should not be **Engineering controls:**

exposed directly. Also install safety shower and eye bath.

Control parameters: Not set up

Personal protective equipment

Respiratory protection: Dust respirator. Follow local and national regulations.

Hand protection: Protective gloves.

Eye protection: Safety glasses. A face-shield, if the situation requires. **Skin and body protection:** Protective clothing. Protective boots, if the situation requires.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Solid

Form: crystal - powder Color: White - Almost white Odor: No data available No data available pH: Melting point/freezing point: No data available **Boiling Point/Range:** No data available Flash Point: No data available

Explosive limits

No data available Lower: No data available Upper: Density: No data available Solubility: No data available

10. STABILITY AND REACTIVITY

Stability: Stable under proper conditions.

May ignite or evolve a flammable gas upon contact with water. Reactivity:

Moisture-sensitive Conditions to avoid:

Incompatible materials: oxidizing agents, acids, water

Hazardous Decomposition Carbon monoxide, Carbon dioxide, Nitrogen oxides (NOx)

Products:

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: No data available Skin corrosion/irritation: No data available Serious eve No data available

damage/irritation:

No data available Germ cell mutagenicity:

Carcinogenicity:

IARC = No data available NTP = No data available Reproductive toxicity: No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity:

No data available Fish: Crustacea: No data available No data available Algae: Persistence / degradability: No data available No data available Bioaccumulative

potential(BCF): Mobillity in soil

log Pow: No data available Soil adsorption (Koc): No data available No data available Henry's Law

constant(PaM³/mol):

13. DISPOSAL CONSIDERATIONS

Recycle to process, if possible. Consult your local regional authorities and an expert of disposal. Take precautions against ignition. Observe all federal, state and local regulations when disposing of the substance

14. TRANSPORT INFORMATION

Hazards Class: 4.3: Substance which, in contact with water, emit flammable gases.

UN-No:

Proper shipping name: Organometallic substance, solid, water-reactive

Packing group:

15. JAPANESE REGULATORY INFORMATION

Class-3 Alkylaluminum Dangerous grade 2 Type-2 Pyrophoric and/or water-reactive Fire Defense Law:

substance

Law for safety of vessels: Hazardous materials notification, Schedule form No.1 Water reactivity inflammability

substance

16. OTHER INFORMATION

The reference company name of written contents

Company: TOKYO CHEMICAL INDUSTRY CO., LTD.

4-10-2, Nihonbashi-honcho, Chuo-ku, Tokyo 103-0023, Japan Address:

Department: Global Business Department

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This SDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.