

No. 809, Chuhua Branch Road, Fengxian District, Shanghai

# SAFETY DATA SHEET

Version: v1

Revision Date: 2023-08-06

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

#### 1.1 Product identifiers

Product name : Diisobutylaluminum hydride

Product Number : D130048
Brand : aladdin

CAS-No. : 1191-15-7(Toluene)

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

Identified uses : Laboratory chemicals, Manufacture of substances.

### 1.3 Details of the supplier of the safety data sheet

Company : Shanghai Aladdin Biochemical Tech Co.,Ltd

Address : 36 Xinjinqiao Road, Shanghai

Telephone : 400-620-6333
Fax : no data available

# 1.4 Emergency telephone number

Emergency Phone : 0532-83889090

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquid (category 2), H225

Acute toxicity, oral (category 5), H303

Skin corrosion/irritation (category 1A), H314

Serious eye damage/eye irritation (Category 1), H318

Reproductive toxicity (category 2), H361

Specific target organ toxicity (single exposure) (category 3), narcotic effects, H336

Specific target organ toxicity (repeated exposure) (category 2), H373

Aspiration hazard (category 1), H304

Acute (short-term) aquatic hazard (category 2), H401



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Long-term aquatic hazard (category 2), H411

### 2.2 GHS Label elements, including precautionary statements

Pictogram 💆 🛂

Signal word Danger

Hazard statement(s)

H225 Highly Flammable liquid and vapor H303 May be harmful if swallowed

H304 May be fatal if swallowed and enters airways
H314 Causes severe skin burns and eye damage

H336 May cause drowsiness or dizziness

H361 Suspected of damaging fertility or the unborn child

H373 Causes damage to organs through prolonged or repeated exposure

H411 Toxic to aquatic life with long lasting effects

Precautionary statement(s)

P201 Obtain special instructions before use.

P210 Keep away from heat, hot surface, sparks, open flames and other ignition

sources. - No smoking.

P202 Do not handle until all safety precautions have been read and understood.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof [electrical/ventilating/lighting/.../] equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P264 Wash hands [and ...] thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P310 Immediately call a POISON CENTER or doctor/physician.
P312 Call a POISON CENTER or doctor/... if you feel unwell.

P363 Wash contaminated clothing before reuse.

P391 Collect spillage.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/...

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off Immediately all contaminated clothing. Rinse SKIN

with water [or shower].

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P370+P378 In case of fire: Use ... to extinguish.

P405 Store locked up.



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P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container to an approved waste disposal plant.

# 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

### **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

Synonyms : DIBAL-H;DIBAL
Formula : no data available
Molecular weight : no data available

Component	Classification	Concentration
Toluene		
CAS-No.: 108-88-3	Flammable liquids Category 2; Acute toxicity Category 5; Skin	
EC-No.: 203-625-9	corrosion/irritation Category 2; Reproductive toxicity Category 2; Specific	;
	target organ toxicity - single exposure Category 3; Specific target organ	
	toxicity - repeated exposure Category 2; Aspiration hazard Category 1;	
	Short-term (acute) aquatic hazard Category 2; Long-term (chronic)	
	aquatic hazard Category 3; H225, H333, H315, H361, H336, H373, H304,	
	H401, H412 Concentration limits: 20 %: STOT SE 3, H336;	

#### Diisobutylaluminum hydride

CAS-No.: 1191-15-7

EC-No.:

### **SECTION 4: First aid measures**

### 4.1 Description of first aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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



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The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

no data available

### **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

Suitable extinguishing media
Dry powder dry sand
Unsuitable extinguishing media
no data available

#### 5.2 Special hazards arising from the substance or mixture

Carbon oxide Hydrogen chloride gas Silica is combustible. The vapor is heavier than air, so it can spread on the ground. Forms explosive mixtures with air at high temperatures. Hazardous gases or vapors may be generated in the event of a fire.

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

Use water spray to cool unopened containers.

#### SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust generation. Avoid breathing vapor, mist or gas. Ensure adequate ventilation. Evacuate people to a safe area. Avoid breathing dust. For personal protection, see section 8.

### 6.2 Environmental precautions

If safety can be ensured, measures can be taken to prevent further leakage or overflow. Do not let the product enter the drain. Avoid release to the surrounding environment.

#### 6.3 Methods and materials for containment and cleaning up

Contain the spill, absorb the spill with non-combustible materials (such as sand, soil, diatomaceous earth, vermiculite), collect it in a container, and dispose of it in accordance with local or national regulations (see section 13).

#### 6.4 Reference to other sections

For disposal see section 13.



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### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid breathing vapor or mist. Keep away from fire sources. -No smoking. Take measures to prevent static electricity from accumulating. Operate in accordance with good industrial hygiene and safety regulations. Wash your hands before breaks and at the end of work. For preventive measures, see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

Keep the container tightly closed and store in a dry and ventilated place. Containers that have been opened must be carefully resealed and kept in an upright position to prevent leakage. Sensitive to humidity

### 7.3 Specific end use(s)

no data available

#### **SECTION 8: Exposure controls/personal protection**

# 8.1 Control parameters

# 8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166(EU).

Skin protection

Gloves must be checked before use. Please use proper methods to remove the gloves (do not touch the outer surface of the gloves), and avoid any skin parts contacting the product. After use, please handle the contaminated gloves carefully according to relevant laws and regulations and effective laboratory rules and procedures. Please clean and blow dry the protective gloves selected for your hands must meet the specifications given in regulation (EU) 2016 / 425 and the en 374 standard derived from it.

**Body Protection** 

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Control of environmental exposure



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Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### **SECTION 9: Physical and chemical properties**

### 9.1 Information on basic physical and chemical properties

a) Appearance form: liquid color: Colorless to Yellow

b) Odour no data available c) Odour Threshold no data available d) pH no data available e) Melting point/freezing point no data available f) Initial boiling point and boiling range 116-118 °C g) Flash point -18 °C

h) Evaporation rate no data available i) Flammability (solid, gas) no data available

j) Upper/lower flammability or

explosive limits no data available k) Vapour pressure no data available l) Vapour density no data available

m) Relative density 0.805

n) Water solubility no data available o) Partition coefficient: n-octanol/water no data available p) Auto-ignition temperature no data available q) Decomposition temperature no data available r) Viscosity no data available s) Explosive properties N no data available t) Oxidizing properties N no data available

## 9.2 Other safety information

no data available

#### **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

no data available

# 10.2 Chemical stability

Stable under recommended storage conditions

#### 10.3 Possibility of hazardous reactions

no data available

#### 10.4 Conditions to avoid

Heat, flames and sparks.



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### 10.5 Incompatible materials

Alkali, oxidizer, strong oxidizer, metal, alcohol

# 10.6 Hazardous decomposition products

no data available

## **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

Acute toxicity

mixture

Acute toxicity

Acute toxicity estimate Oral-4,546 mg/kg

(Calculation method)

Acute toxicity estimate Inhalation-4 h-> 40 mg/l

(Calculation method)

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

Toluene inhalation studies have shown animal penile, foreskin, and scrotal hypersensitivity and ulcers. , As far as we know, the chemical, physical and toxic properties have not yet been completed

Whole research., This substance can cause great damage to mucosal tissues and upper respiratory tract, eyes and



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skin., Cramps, inflammation, sore throat, cramps, hair

Inflammation, bronchitis, pneumonia, pulmonary edema, burning sensation:, cough, wheezing, laryngitis, shortness of breath

#### **SECTION 12: Ecological information**

#### 12.1 Toxicity

Methylbenzene

Toxicity to fish flow test LC50-Oncorhynchus kisutch (coho salmon)-5.5 mg/l-96h

Remarks: (ECHA)

No ridge to water flea and other aquatic species

Toxicity of Vertebral Animals

EC50-Ceriodaphnia dubia (Ceriodaphnia dubia)-3.78 mg/l-48 h

(US-EPA)

Toxicity to bacteria static test EC50-bacteria-84 mg/l-24 h

Remarks: (ECHA)

Tert-Butyldimethylchlorosilane

No ridge to water flea and other aquatic species

Toxicity of Vertebral Animals

Static test EC50-Daphnia magna (Water flea)-6.49 mg/l-48 h

(OECD Test Guideline 202)

Toxicity to algae ErC50-Pseudokirchneriella subcapitata (green algae)-84 mg/l-72 h

(OECD Test Guideline 201)

NOEC-Pseudokirchneriella subcapitata (green algae)-12.5 mg/l-72 h

(OECD Test Guideline 201)

# 12.2 Persistence and degradability

no data available

### 12.3 Bioaccumulative potential

no data available



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#### 12.4 Mobility in soil

no data available

#### 12.5 Results of PBT and vPvB assessment

no data available

#### 12.6 Other adverse effects

no data available

#### **SECTION 13:**

#### 13.1 Disposal considerations

**Product** 

Hand over the remaining and non-recyclable solution to a licensed company for disposal. Burn in a chemical incinerator equipped with an afterburner and scrubbing equipment, especially when it is ignited, because this substance is a highly flammable substance

Contaminated packaging

Dispose of as unused product.

### **SECTION 14: Transport information**

DOT (US)

UN number: 2924 Packing group: II Class: 3 (8)

Proper shipping name: Flammable Reportable Quantity(RQ): no data Poison Inhalation Hazard: no data

liquid, corrosive, n.o.s. (Toluene, tert.- available available

butylchlorodimethylsilane) Environmental Hazards: No

**IMDG** 

UN number: 2924 Packing group: II EMS-No: no data available

Proper shipping name: Flammable liquid, corrosive, n.o.s. (Toluene, tert.-butylchlorodimethylsilane)

IATA

UN number: 2924 Packing group: II Class: 3 (8)

Proper shipping name: Flammable liquid, corrosive, n.o.s. (Toluene, tert.-butylchlorodimethylsilane)

#### **SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### **SECTION 16: Other information**

Further information



Shanghai Aladdin Biochemical Technology Co., Ltd. No. 809, Chuhua Branch Road, Fengxian District, Shanghai

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