SAFETY DATA SHEET

Version: v1

Revision Date: 2023-11-

Print Date: 2023-11-13

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

1.1 Product identifiers

Product name : 3,3'-Diaminobenzidine

Product Number : D106468
Brand : aladdin
CAS-No. : 91-95-2

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

Identified uses : 仅供科研用途,不作为药物、家庭备用药或其它用途。

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)

2.2 GHS Label elements, including precautionary statements

Pictogram

Signal word Danger

Hazard statement(s)

H341 Suspected of causing genetic defects

H350 May cause cancer

Precautionary statement(s)

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

P281 Use personal protective equipment as required.

P405 Store locked up.

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

3.1 Substances

Synonyms : 3,3',4,4'-Biphenyltetramine; 3,3',4,4'-Tetraaminobiphenyl; DAB

Formula : C12H14N4

Molecular weight : 214.27

CAS No. : 91-95-2

EC-NO. : 202-110-6

Component	Classification	Concentration
3,3'-Diaminobenzidine		
	no data available	99%

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

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

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

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

no data available

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

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media

no data available

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products formed under fire conditions.- Carbon oxides, nitrogen oxides (NOx)

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

no data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.2 Environmental precautions

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

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

no data available

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Light sensitive.

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

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

impervious 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 full-face particle respirator type N100 (US) or type P3 (EN 143) 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

no data available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance
b) Odour
c) Odour Threshold
data available
no data available
no data available
no data available

e) Melting point/freezing point 175 - 177 °C (347 - 351 °F) - lit.

f) Initial boiling point and boiling range no data available g) Flash point no data available h) Evaporation rate no data available i) Flammability (solid, gas) no data available

j) Upper/lower flammability or explosive

no data available limits k) Vapour pressure no data available I) Vapour density no data available no data available m) Relative density n) Water solubility no data available o) Partition coefficient: n-octanol/water no data available no data available p) Auto-ignition temperature 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

Stable under recommended storage conditions.

10.2 Chemical stability

no data available

10.3 Possibility of hazardous reactions

Light.

10.4 Conditions to avoid

Strong oxidizing agents

10.5 Incompatible materials

Hazardous decomposition products formed under fire conditions.- Carbon oxides, nitrogen oxides (NOx)

10.6 Hazardous decomposition products

Oral LD50 LD50 Oral - mouse - 1,834 mg/kg

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

In vitro tests showed mutagenic effects Genotoxicity in vitro - rat - Liver Unscheduled DNA synthesis Genotoxicity in vivo - mouse - Intraperitoneal Cytogenetic analysis

Germ cell mutagenicity

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Carcinogenicity

no data available

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

May be harmful if inhaled. May cause respiratory tract irritation.

Aspiration hazard

no data available

Additional Information

no data available

SECTION 12: Ecological information

12.1 Toxicity

no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

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

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

DOT (US)

UN number: no data available Proper shipping name: no data

available

Packing group: no data available Reportable Quantity(RQ): no data

available

Class: no data available

Poison Inhalation Hazard: no data

available

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

Environmental Hazards: no data available

IMDG

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

Proper shipping name: no data available

IATA

UN number: no data available Packing group: no data available Class: no data available

Proper shipping name: no data available

SECTION 15: Regulatory information

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

SECTION 16: Other information

Further information

Copyright Aladdin Co. Ltd. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Aladdin Co. Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.

Version: v1 Revision Date: 2023-11- Print Date: 2023-11-

05 13