

1,2-Benzenediamine-15N2: sc-208718



The Power to Question

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: 1,2-Benzenediamine-15N2
Catalog Number: sc-208718
Supplier: Santa Cruz Biotechnology, Inc.
2145 Delaware Avenue
Santa Cruz, California 95060
800.457.3801 or 831.457.3800
Emergency: ChemWatch
Within the US & Canada: 877-715-9305
Outside the US & Canada: +800 2436 2255
(1-800-CHEMCALL) or call +613 9573 3112

2. HAZARDS IDENTIFICATION

WHMIS Classification

D1B
D2B

Toxic Material Causing Immediate and
Serious Toxic Effects

Toxic by ingestion
Moderate eye irritant
Skin sensitiser
Mutagen

HMIS Classification

Health hazard: 2
Chronic Health Hazard: *
Flammability: 0
Physical hazards: 0

Target Organs

Bladder, Liver, Kidney

Potential Health Effects

Inhalation Toxic if inhaled. Causes respiratory tract irritation.
Skin Causes skin irritation.
Eyes Causes eye irritation.
Ingestion Toxic if swallowed.

GHS Classification

Acute toxicity, Inhalation (Category 4)
Acute toxicity, Dermal (Category 4)
Acute toxicity, Oral (Category 3)
Eye irritation (Category 2A)
Skin sensitization (Category 1)
Germ cell mutagenicity (Category 2)
Carcinogenicity (Category 2)
Specific target organ toxicity - single exposure; respiratory tract (Category 2)
Acute aquatic toxicity (Category 1)
Chronic aquatic toxicity (Category 1)

GHS Label elements, including precautionary statements

Signal word Danger

Hazard statements

H301	Toxic if swallowed.
H312/H332	Harmful in contact with skin or if inhaled.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H371	May cause damage to organs.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements

P260	Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing.
P301/P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
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 an approved waste disposal plant.



3. COMPOSITION/INFORMATION ON INGREDIENTS

Molecular Formula:	$C_6H_8^{15}N_2$
Molecular Weight:	110.13
CAS Registry #:	116006-97-4
EC#:	
Synonyms:	1,2-Diaminobenzene- $^{15}N_2$

4. 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

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media

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

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid dust or aerosol formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust or aerosols. Provide appropriate exhaust ventilation at places where dust/aerosol is formed. Normal measures for preventative fire protection.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Store at 2-8°C under inert atmosphere.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

CAS-No. 95-54-5 (o-Phenylenediamine)

TWA	0.1 mg/m ³	Canada.	Alberta, Occupational Health and Safety Code (table 2: OEL)
TWA	0.1 mg/m ³	Canada.	British Columbia OEL
TWAEV	0.1 mg/m ³	Canada.	Ontario OELs
TWAEV	0.1 mg/m ³	Canada.	Quebec OELs
TWA	0.1 mg/m ³	USA.	ACGIH Threshold Limit Values (TLV)

Notes: Confirmed animal carcinogen with unknown relevance to humans: The agent is carcinogenic in experimental animals at a relatively high dose, by route(s) of administration, at site(s), of histologic type(s), or by mechanism(s) that may not be relevant to worker exposure. Available epidemiologic studies do not confirm an increased risk of cancer in exposed humans. Available evidence does not suggest that the agent is likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure.

Personal protective equipment

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).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's 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.

Eye protection

Face shield or safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Complete suit protecting against chemicals, if needed after risk assessment. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

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

Specific engineering controls

Use mechanical exhaust or laboratory fumehood to avoid exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Brown solid

Safety data

pH	N/A	Melting point	N/A
Boiling point	N/A	Flash point	N/A
Ignition temperature	N/A	Lower explosion limit	N/A
Upper explosion limit	N/A	Vapour pressure	N/A
Density	N/A	Water solubility	N/A

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Conditions to avoid

no data available

Materials to avoid

Strong oxidizing agents.

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions: carbon oxides, nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

LD50 (oral - rat) 510 mg/kg
LD50 (oral - mouse) 366 mg/kg
LC50 (inhalation - rat) 1873 mg/m³
KD50 (dermal - rat) > 5gm/kg

Irritation and corrosion

Skin/eye/respiratory tract irritant

Sensitization

May cause allergic skin reaction.

Germ Cell Mutagenicity

Laboratory results have shown mutagenicity.

Carcinogenicity

IARC: To the best of our knowledge, this compound has not been identified as a possible or potential human carcinogen by IARC.

Reproductive toxicity/Teratogenicity

no data available

Potential health effects

Inhalation Toxic if inhaled. Causes respiratory tract irritation.
Skin Causes skin irritation.
Eyes Causes eye irritation.
Ingestion Toxic if swallowed.

Signs and Symptoms of Exposure

Weakness. Convulsions. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information

RTECS: SS7875000

12. ECOLOGICAL INFORMATION

Toxicity

Toxic to aquatic organisms

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

Very toxic to the environment.

13. 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.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

UN-Number: 1673

Class: 6.1

Packing group: III

Proper shipping name: Phenylenediamines

Marine pollutant: No

Poison Inhalation Hazard: No

IMDG

UN-Number: 1673

Class: 6.1

Packing group: III

EMS-No: F-A, S-A

Proper shipping name: PHENYLENEDIAMINES

Marine pollutant: No

IATA

UN-Number: 1673

Class: 6.1

Packing group: III

Proper shipping name: Phenylenediamines

15. REGULATORY INFORMATION

DSL Status

Product is on the Canadian DSL list.

WHMIS Classification

D1B

D2B

Toxic Material Causing Immediate and
Serious Toxic Effects

Toxic by ingestion
Moderate eye irritant
Skin sensitiser
Mutagen

16. OTHER INFORMATION

Further information

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.

04/28/2011