

[Barium 4-Diphenylamine Sulfonate](#)

[Pricing >](#)

Linear Formula	(C ₁₄ H ₁₀ NO ₂ S) ₂ Ba
Pubchem CID	517003
MDL Number	MFCDD0007497
EC No.	228-278-0
IUPAC Name	2-anilinobenzenesulfonate; barium(2+)
Beilstein/Reaxys No.	3795146
SMILES	C1=CC=C(C=C1)NC2=CC=C(C=C2)S(=O)(=O)[O-].C1=CC=C(C=C1)NC2=CC=C(C=C2)S(=O)(=O)[O-].[Ba+2]
Inchi Identifier	InChI=1S/2C12H11NO3S.Ba/c2*14-17(15,16)12-8-6-11(7-9-12)13-10-4-2-1-3-5-10;/h2*1-9,13H,(H,14,15,16)/q;+2/p-2
Inchi Key	IVCNVXFNTKXMCU-UHFFFAOYSA-L

Signal Word	Danger
Hazard Statements	H302-H332
Hazard Codes	Xi
Risk Codes	Xi
Safety Statements	N/A
Transport Information	NONH for all modes of transport
WGK Germany	1

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SAFETY DATA SHEET

Date Accessed: 05/04/2024

Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifiers: All applicable American Elements product codes for CAS #6211-24-1

Relevant identified uses of the substance:
Scientific research and development

Supplier details:
American Elements
10884 Weyburn Ave.
Los Angeles, CA 90024
Tel: +1 310-208-0551
Fax: +1 310-208-0351

Emergency telephone number:
Domestic, North America +1 800-424-9300
International +1 703-527-3887

SECTION 2. HAZARDS IDENTIFICATION

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification

Acute toxicity - Oral Category 4

Acute toxicity - Inhalation (Dusts/Mists) Category 4

Label elements

Signal word Warning

Hazard statements

HARMFUL IF SWALLOWED

HARMFUL IF INHALED

Symbols/Pictograms



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after

handling

Do not eat, drink or smoke when using this product

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

IF INHALED: Remove victim to fresh air and keep at rest in a

position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal

plant

Hazards not otherwise classified (HNOC)

N/A

Other Information

NFPA Health hazards 2 HMIS

Flammability 0

Instability -

Physical and chemical properties

-

Health hazards 2

Flammability 1

Physical hazards

Personal protection -

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS No 6211-24-1

Molecular Weight 633.88

Formula C₂₄H₂₀BaN₂O₆S₂

Chemical Name Barium diphenylamine-4-sulfonate

CAS No 6211-24-1

weight-% >98

Oral LD50, dermal LD50, Inhalation LC50 -

SECTION 4. FIRST AID MEASURES

First Aid Measures

General advice If symptoms persist, call a physician.

Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.

Eye contact Immediately flush with plenty of water.

After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

Skin Contact Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Inhalation Remove to fresh air. Call a physician. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

Ingestion Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. Do NOT induce vomiting.

Self-protection of the first aider Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Symptoms No data available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

Suitable Extinguishing Media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None.

Specific hazards arising from the chemical
Specific hazards arising from the
chemical
No data available.
Hazardous combustion products Hydrogen sulfide.
Carbon oxides. Nitrogen oxides (NOx).
Explosion data
Sensitivity to Mechanical Impact No data available.
Sensitivity to Static Discharge No data available.
Protective equipment and precautions for firefighters
Protective equipment and precautions
for firefighters
As in any fire, wear self-contained breathing
apparatus pressure-demand, MSHA/NIOSH
(approved or equivalent) and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and
emergency procedures
Personal precautions Ensure adequate ventilation,
especially in confined areas.
Environmental precautions
Environmental precautions Prevent entry into
waterways, sewers, basements or confined areas. Do
not flush into
surface water or sanitary sewer system. See Section
12 for additional Ecological
Information.
Methods and material for containment and cleaning
up
Methods for containment Prevent further leakage or
spillage if safe to do so.
Methods for cleaning up Use personal protective
equipment as required. Cover powder spill with plastic
sheet or tarp
to minimize spreading and keep powder dry. Take up
mechanically, placing in appropriate
containers for disposal. Avoid creating dust. Clean
contaminated surface thoroughly.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling
Advice on safe handling Avoid contact with skin, eyes
or clothing. Use personal protective equipment as
required.
Wash contaminated clothing before reuse. Do not
breathe dust/fume/gas/mist/vapors/spray.
Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities Conditions Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Store at room temperature. Incompatible materials None known based on information supplied.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines .

Other Information Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962

(11th Cir., 1992).

Chemical Name ACGIH TLV OSHA PEL NIOSH IDLH

Barium diphenylamine-4-sulfonate

6211-24-1

TWA: 0.5 mg/m³ Ba TWA: 0.5 mg/m³ Ba

(vacated) TWA: 0.5 mg/m³ Ba

TWA: 0.5 mg/m³ except Barium

sulfate Ba

NIOSH IDLH Immediately Dangerous to Life or Health

Appropriate engineering controls

Engineering Controls Showers

Eyewash stations

Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

Skin and Body Protection Wear protective gloves and protective clothing.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-

pressure supplied air respirators may be

required for high airborne contaminant concentrations.

Respiratory protection must be

provided in accordance with current local regulations.

General Hygiene Considerations Handle in

accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Solid

Appearance No data available

Odor No data available

Property Values

pH No data available
Melting point/freezing point No data available
Boiling point No data available
Flash point No data available
Density No data available
Evaporation rate No data available
Upper flammability limits No data available
Lower flammability limit No data available
Vapor pressure No data available
Vapor density No data available
Specific gravity No data available
Water solubility No data available
Solubility in other solvents No data available
Partition coefficient No data available
Autoignition temperature No data available
Decomposition temperature No data available
Kinematic viscosity No data available
Explosive properties No data available
Oxidizing properties No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity N/A

Chemical stability Stable under recommended storage conditions.

Possibility of Hazardous Reactions None under normal processing.

Hazardous polymerization No data available.

Conditions to avoid Extremes of temperature and direct sunlight.

Incompatible materials Strong oxidizing agents.

Hazardous Decomposition Products Hydrogen sulfide. Carbon oxides. Nitrogen oxides (NO_x).

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation No data available.

Eye contact No data available.

Skin Contact No data available.

Ingestion No data available.

Information on toxicological effects

Symptoms No data available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity No data available.

Numerical measures of toxicity - Product Information

Unknown acute toxicity No data available

The following values are calculated based on chapter

3.1 of the GHS document
ATEmix (oral) 500 mg/kg
ATEmix (inhalation-dust/mist) 1.5 mg/l

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity May cause long lasting harmful effects to aquatic life

100% of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Persistence and degradability No data available.

Bioaccumulation No data available.

Mobility No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Do not reuse container.

Other Information Waste codes should be assigned by the user based on the application for which the product was used.

California Hazardous Waste Status This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name California Hazardous Waste Status
Barium diphenylamine-4-sulfonate
6211-24-1

Toxic Toxic soluble

SECTION 14. TRANSPORT INFORMATION

DOT

UN/ID no UN1564

Hazard Class 6.1

Packing Group III

Proper shipping name Barium compounds, n.o.s.

Description UN1564, Barium compounds, n.o.s. (Barium diphenylamine-4-sulfonate), 6.1, III

Emergency Response Guide Number 154

IMDG

UN/ID no UN1564

Hazard Class 6.1

Packing Group III

Proper shipping name Barium compound, n.o.s.

Description UN1564, Barium compound, n.o.s.

(Barium diphenylamine-4-sulfonate), 6.1, III
Special Provisions IB8, IP3, T1, TP33
EmS-No
F-A, S-A
IATA
UN/ID no UN1564
Hazard Class 6.1
Packing Group III
Proper shipping name Barium compound, n.o.s.
Description UN1564, Barium compound, n.o.s., 6.1, III

SECTION 15. REGULATORY INFORMATION

International Inventories

All of the components in the product are on the following Inventory lists

TSCA (United States): Canada (DSL/NDSL) Europe (EINECS/ELINCS/NLP) Australia (AICS) South Korea (KECL): China (IECSC)

Philippines (PICCS)

Chemical Name TSCA DSL NDSL EINECS ELINCS ENCS IECSC KECL PICCS AICS

Barium

diphenylamine-4-sulfonate

X X - X - - X X X X

X - Listed

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any

chemicals which are subject to the reporting

requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute health hazard Yes

Chronic Health Hazard No

Fire hazard No
Sudden release of pressure hazard No
Reactive hazard No
CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).
US State Regulations
California Proposition 65
This product does not contain any Proposition 65 chemicals.
U.S. State Right-to-Know Regulations
Chemical Name New Jersey Massachusetts
Pennsylvania
Barium diphenylamine-4-sulfonate
6211-24-1
X Not Listed X

16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). 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. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.
