

SAFETY DATA SHEET

Date Printed: 05/11/2024

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SECTION 1. IDENTIFICATION

Product Identifier: (5N) 99.999% Arsenobetaine

Product Code: AS-BETE-05

CAS Number: 64436-13-1

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:
+1 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122).

Classification

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Signal word Not classified

Hazard statements

Symbols/Pictograms Not classified

Precautionary Statements - Prevention Wash hands thoroughly after handling

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Hazards not otherwise classified (HNOC)

Hazards not otherwise classified (HNOC) N/A

Other Information

Unknown acute toxicity 100% of the mixture consists of ingredient(s) of unknown toxicity.

NFPA

Health hazards 2

Flammability 0

Instability -

Physical and chemical
properties -

HMIS
Health hazards 2
Flammability 0
Physical hazards 0

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS No 64436-13-1
Molecular Weight 178.06
Formula C₅H₁₁AsO₂
Chemical Name CAS No weight-% Oral LD₅₀ dermal LD₅₀ Inhalation LC₅₀
Arsenobetaine 64436-13-1 >98 - - -

SECTION 4. FIRST AID MEASURES

First Aid Measures

General advice Consult a physician if necessary. Remove to fresh air.

Eye contact Wash with plenty of water.

Skin Contact Wash skin with soap and water.

Inhalation Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.

Ingestion Never give anything by mouth to an unconscious person. Clean mouth with water.

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 In case of fire: Use CO₂, dry chemical, or foam for extinction.

Unsuitable Extinguishing Media Contact with water liberates toxic, highly flammable gas. DO NOT USE WATER.

Specific hazards arising from the chemical

Specific hazards arising from the chemical

Highly flammable.

Hazardous combustion products Carbon oxides.

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 See Section 12 for additional Ecological Information. Prevent product from entering drains.

Should not be released into the environment.

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 May cause damage to organs through prolonged or repeated exposure.

Contact with water

liberates toxic, highly flammable gas.

Conditions for safe storage, including any incompatibilities Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store at room temperature.

Incompatible materials None known based on information supplied.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering Controls Showers

Eyewash stations

Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or 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 Contact with water liberates toxic, highly flammable gas.
Hazardous polymerization No data available.
Conditions to avoid Extremes of temperature and direct sunlight.
Incompatible materials Strong oxidizing agents.
Hazardous Decomposition Products Carbon oxides.

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.
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.
Chemical Name ACGIH IARC NTP OSHA
Arsenobetaine
64436-13-1
- Group 3 - X
IARC (International Agency for Research on Cancer) Not classifiable as a human carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor) X - Present
Numerical measures of toxicity - Product Information
Unknown acute toxicity 100% of the mixture consists of ingredient(s) of unknown toxicity

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity May cause long lasting harmful effects to aquatic life
100% of the mixture consists of components(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
Should not be released into the environment. Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging Do not reuse container.

SECTION 14. TRANSPORT INFORMATION

DOT
UN/ID no UN3077
Hazard Class 9
Packing Group III
Proper shipping name Environmentally hazardous substance, solid, n.o.s.*
Description UN3077, Environmentally hazardous substance, solid, n.o.s.*, 9, III
Emergency Response Guide Number 171
IMDG
UN/ID no UN3077
Hazard Class 9
Packing Group III
Proper shipping name Environmentally hazardous substance, solid, n.o.s.*
Description UN3077, Environmentally hazardous substance, solid, n.o.s.*, 9, III
Special Provisions 146, 335, A112, B54, B120, IB8, IP3, N20, T1, TP33, 8
EmS-No F-A, S-F
IATA
UN/ID no UN3077
Hazard Class 9
Packing Group III
Proper shipping name Environmentally hazardous substance, solid, n.o.s.*
Description UN3077, Environmentally hazardous substance, solid, n.o.s.*, 9, III

SECTION 15. REGULATORY INFORMATION

International Inventories
All of the components in the product are on the following Inventory lists
No data available

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 No

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

This product does not contain any substances regulated by state right-to-know regulations

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.