



Barium Vanadate		Pricing >
Linear Formula	$\text{Ba}_3(\text{VO}_4)_2$	
Pubchem CID	92028862	
MDL Number	N/A	
EC No.	237-063-0	
IUPAC Name	barium(2+); trioxido(dioxo)vanadium	
SMILES	[O-][V](=O)([O-])[O-].[O-][V](=O)([O-])[O-].[Ba+2].[Ba+2].[Ba+2]	
Inchl Identifier	InChI=1S/3Ba.8O.2V/q3*+2;;;6*-1;;	
Inchl Key	CPSHMDNCLUGKEJ-UHFFFAOYSA-N	
Signal Word	Warning	
Hazard Statements	H341-H361d-H372-H332-H302-H335-H411	
Hazard Codes	Xn	
Precautionary Statements	P260-P301 + P310-P302 + P350-P261-P405-P501	
Risk Codes	R20/22-R37-R48/23-R51/53-R63-R68	
Safety Statements	S36/37-S38-S45-S61	
Transport Information	N/A	
GHS Pictograms	GHS07 Exclamation Point  GHS08 Health Hazard 	

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SAFETY DATA SHEET

Date Accessed: 04/24/2024

Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifiers: All applicable American Elements product codes for CAS #39416-30-3

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

OSHA regulatory status This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

Potential health effects

Routes of exposure Inhalation.

Eyes Health injuries are not known or expected under normal use.

Skin Health injuries are not known or expected under normal use.

Inhalation Prolonged inhalation may be harmful.

Health injuries are not known or expected under normal use.

Ingestion Health injuries are not known or expected under normal use.

Potential environmental effects May cause long-term adverse effects in the environment.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components CAS # Percent

Barium Vanadate 39416-30-3 100

SECTION 4. FIRST AID MEASURES

First aid procedures

Inhalation If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.

Call a physician if symptoms develop or persist.

Skin contact Rinse skin with water/shower. Get medical attention if irritation develops and persists.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. If ingestion of a large amount

does occur, call a poison control center immediately.

SECTION 5. FIREFIGHTING MEASURES

Flammable properties The product is not flammable.
No unusual fire or explosion hazards noted.
Fire fighting equipment/instructions Use water spray to cool unopened containers.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Personal precautions
Environmental precautions Prevent further leakage or spillage if safe to do so. Do not contaminate water.
Methods for containment Prevent entry into waterways, sewer, basements or confined areas. Should not be released into the environment. Following product recovery, flush area with water.
Methods for cleaning up
For waste disposal, see section 13 of the MSDS.

SECTION 7. HANDLING AND STORAGE

7. Handling and Storage
Handling Avoid prolonged exposure. Avoid release to the environment. Handle and open container with care.

Storage Store in original tightly closed container. Use care in handling/storage. Store away from incompatible materials (see Section 10 of the MSDS).

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits
US. ACGIH Threshold Limit Values
Material Type Value
Barium Vanadate (CAS TWA 0.5 mg/m³
39416-30-3)

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)
Material Type Value
Barium Vanadate (CAS PEL 0.5 mg/m³ 39416-30-3)
US. NIOSH: Pocket Guide to Chemical Hazards
Material Type Value Form
Barium Vanadate (CAS Ceiling 0.05 mg/m³ Dust. 39416-30-3)
TWA 0.5 mg/m³
Engineering controls Good general ventilation (typically 10 air changes per hour) should be used.
Ventilation rates
should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Engineering controls
Personal protective equipment
Eye / face protection Eye wash fountain is recommended.
Skin protection Wear suitable protective clothing.
Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
Control parameters Follow standard monitoring procedures.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Physical state Solid.
Form Solid. Powder
Color Not available.
Odor Not available
Odor threshold Not available.
pH Not available.
Vapor pressure Not available.
Vapor density Not available.
Boiling point Not available.
Melting point/Freezing point Not available.
Solubility (water) Not available.
Specific gravity Not available.

Relative density Not available.
Flash point Not available.
Flammability limits in air, upper,
% by volume
Not available.
Flammability limits in air, lower,
% by volume
Not available.
Auto-ignition temperature Not available.
Molecular formula Ba.O.V
Chemical stability Material is stable under normal
conditions.
Conditions to avoid Contact with incompatible
materials.
Incompatible materials Not available.
Hazardous decomposition No hazardous
decomposition products are known.
products

SECTION 10. STABILITY AND REACTIVITY

Chemical stability Material is stable under normal
conditions.
Conditions to avoid Contact with incompatible
materials.
Incompatible materials Not available.
Hazardous decomposition No hazardous
decomposition products are known.
products

SECTION 11. TOXICOLOGICAL INFORMATION

Chronic effects Prolonged inhalation may be harmful.
Carcinogenicity
ACGIH Carcinogens
Barium Vanadate (CAS 39416-30-3) A4 Not
classifiable as a human carcinogen.
US. OSHA Specifically Regulated Substances (29
CFR 1910.1001-1050)
Not listed.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity Contains a substance which causes risk of
hazardous effects to the environment.
Environmental effects An environmental hazard
cannot be excluded in the event of unprofessional
handling or disposal.

Persistence and degradability Not available.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste codes D005: Waste Barium

The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain

into sewers/water supplies. Dispose in accordance with all applicable regulations.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions). N/A

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

SECTION 15. REGULATORY INFORMATION

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA (Superfund) reportable quantity, lbs

Barium Vanadate: 1000 LBS

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - No

Delayed Hazard - No

Fire Hazard - No

Pressure Hazard - No

Reactivity Hazard - No

Section 302 extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Safe Drinking Water Act (SDWA)

2 mg/l

2 mg/l

Contaminate candidate list

International Inventories

Country(s) or region Inventory name On inventory (yes/no)*

Australia Australian Inventory of Chemical Substances (AICS) No

Canada Domestic Substances List (DSL) No

Canada Non-Domestic Substances List (NDSL) Yes

China Inventory of Existing Chemical Substances in China (IECSC) No

Europe European Inventory of Existing Commercial Chemical Substances (EINECS) No

Europe European List of Notified Chemical Substances (ELINCS) No

Japan Inventory of Existing and New Chemical Substances (ENCS) No

Korea Existing Chemicals List (ECL) No

New Zealand New Zealand Inventory No

Philippines Philippine Inventory of Chemicals and Chemical Substances No (PICCS)

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

US state regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

Not regulated.
US. Pennsylvania Worker and Community Right-to-Know Law
Not listed.
US. Rhode Island RTK
Not regulated.

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.
