SAFETY DATA SHEETS

According to the UN GHS revision 9

Version: 1.1
Creation Date: July 15, 2019
Revision Date: August 17, 2023

SECTION 1: Identification

1.1 GHS Product identifier

Product name 25BB7EKE2E 7727-43-7 UNII-25BB7EKE2E Artificial barite Artificial heavy spar BA147 Bakontal Baraflave Baricon Baridol Barii sulphas Barite Baritogen deluxe Baritop Liquibarine Liquid Barosperse Barium sulfate Blanc fixe CI 77120 Pigment white 21 Sulfuric acid, barium salt (1:1) Radiobaryt Radio-Baryx Radiopaque Raybar Readi-CAT Readi-CAT 2 Recto Barium Redi-Flow Rugar Solbar EPA Pesticide Chemical Code 007502 Epi-C Epi-Stat 57 Epi-Stat 61 Esopho-CAT Esophotrast Esophotrast esophageal cream Eweiss Finemeal Gastropaque-S Gel-Unix E-Z-HD HD 85 HD 200 Plus HiTone HSDB 5041 Intropaque Lactobaryt EINECS 231-784-4 Enamel White EneCat EneMark EneSet EntroBar Baryxine Basofor Bayrites BF 1 (salt) BF 10 (sulfate) Caswell No. 071B E-Z-Cat Concentrate CI Pigment white 21 Citobaryum Colonatrast Danobaryt Actybaryte Barium sulfate (1:1) Barium sulphate, natural AI3-03611 C.I. 77120 C.I. Pigment White 21 E-Z Preparations E-Z-AC Supramike Travad Ultra-R Umbrasol A Unibaryt Unit-Pak Veri-O-Pake Xylocaine viscous Baritop P Baritop 100 Baritop G Powder Barium 100 Barium Andreu Barium sulfate (BaSO4) Barium sulfuricum Barium sulphate Barobag Barocat Barodense Baroloid Barosperse Barosperse 110 Barosperse II Barotrast Bar-Test Baryta White Barytes Barytes 22 Barytgen Baryum (sulfate de) Baryx Colloidal Radimix Colon Liquid E-Z-Paque Liquid Polibar Liquid Polibar Plus Liquid Sol-O-Pake Liquipake Macropaque Microbar Microfanox Micropaque Micropaque RD Microtrast Mikabarium B Mikabarium F Mixobar E-Z-Paste esophageal cream Permanent White Pigment White 22 Polibar Precipitated barium sulphate PrepCat Mixture III Neobalgin Neobar Novopaque Oesobar X-Opac Oratrast E-Z-Paque Sol-O-Pake Sparkle Granules SS 50 Suspobar Tixobar TomoCat 1000 Concentrate TomoCat Concentrate TonoJug 2000 Tonopaque Topcontral Barium sulfate [USP:JAN] Tagitol V Varibar Nectar EC 231-784-4 Readi-Cat 2 Smoothies

1.2 Other means of identification

Product number 7727-43-7
Other names Barium sulphate; Precipitated Barium Sulfate

1.3 Recommended use of the chemical and restrictions on use

Identified uses For laboratory and Industrial use only.
Uses advised against no data available

1.4 Supplier's details

Company Zhongshan Greenrock Technology Co., Ltd.
Address Jinsan Avenue, Sanjiao Town, Zhongshan City, Guangdong Province, China
Telephone +86-2087066781

1.5 Emergency phone number

Emergency phone number +86-2087066781
Service hours 'Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT +8 hours).

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

Not classified.

2.2 GHS label elements, including precautionary statements

Pictogram(s) No symbol.
Signal word No signal word
Hazard statement(s) none
Precautionary statement(s)
Prevention none

Response none
Storage none
Disposal none

2.3 Other hazards which do not result in classification

no data available

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
25BB7EKE2E 7727-43-7 UNII-25BB7EKE2E Artificial barite Artificial heavy spar BA147 Bakontal Baraflave Baricon Baridol Barii sulphas Barite Baritogen deluxe Baritop Liquibarine Liquid Barosperse Barium sulfate Blanc fixe CI 77120 Pigment white 21 Sulfuric acid, barium salt (1:1) Radiobaryt Radio-Baryx Radiopaque Raybar Readi-CAT Readi-CAT 2 Recto Barium Redi-Flow Rugar Solbar EPA Pesticide Chemical Code 007502 Epi-C Epi-Stat 57 Epi-Stat 61 Esopho-CAT Esophotrast Esophotrast esophageal cream Eweiss Finemeal Gastropaque-S Gel-Unix E-Z-HD HD 85 HD 200 Plus HiTone HSDB 5041 Intropaque Lactobaryt EINECS 231-784-4 Enamel White EneCat EneMark EneSet EntroBar Baryxine Basofor Bayrites BF 1 (salt) BF 10 (sulfate) Caswell No. 071B E-Z-Cat Concentrate CI Pigment white 21 Citobaryum Colonatrast Danobaryt Actybaryte Barium sulfate (1:1) Barium sulphate, natural AI3-03611 C.I. 77120 C.I. Pigment White 21 E-Z Preparations E-Z-AC Supramike Travad Ultra-R Umbrasol A Unibaryt Unit-Pak Veri-O-Pake Xylocaine viscous Baritop P Baritop 100 Baritop G Powder Barium 100 Barium Andreu Barium sulfate (BaSO4) Barium sulfuricum Barium sulphate Barobag Barocat Barodense Baroloid Barosperse Barosperse 110 Barosperse II Barotrast Bar-Test Baryta White Barytes Barytes 22 Barytgen Baryum (sulfate de) Baryx Colloidal Radimix Colon Liquid E-Z-Paque Liquid Polibar Liquid Polibar Plus Liquid Sol-O-Pake Liquipake Macropaque Microbar Microfanox Micropaque Micropaque RD Microtrast Mikabarium B Mikabarium F Mixobar E-Z-Paste esophageal cream Permanent White Pigment White 22 Polibar Precipitated barium sulphate PrepCat Mixture III Neobalgin Neobar Novopaque Oesobar X-Opac Oratrast E-Z-Paque Sol-O-Pake Sparkle Granules SS 50 Suspobar Tixobar TomoCat 1000 Concentrate TomoCat Concentrate TonoJug 2000 Tonopaque Topcontral Barium sulfate [USP:JAN] Tagitol V Varibar Nectar EC 231-784-4 Readi-Cat 2 Smoothies	Barium sulfate	7727-43-7	231-784-4	100%

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

If inhaled

Fresh air, rest.

Following skin contact

Remove contaminated clothes. Rinse skin with plenty of water or shower.

Following eye contact

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

Following ingestion

Rinse mouth.

4.2 Most important symptoms/effects, acute and delayed

Exposure Routes: inhalation, skin and/or eye contact Symptoms: Irritation eyes, nose, upper respiratory system; benign pneumoconiosis (baritosis) Target Organs: Eyes, respiratory system (NIOSH, 2016)

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Immediate first aid: Ensure that adequate decontamination has been carried out. If patient is not breathing, start artificial respiration, preferably with a demand-valve resuscitator, bag-valve-mask device, or pocket mask, as trained. Perform CPR as necessary. Immediately flush contaminated eyes with gently flowing water. Do not induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain an open airway and prevent aspiration. Keep patient quiet and maintain normal body temperature. Obtain medical attention. Barium and Related Compounds

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Use dry chemical, carbon dioxide, water spray, or alcohol foam extinguishers ... If material or contaminated runoff enters waterways, notify downstream users of potentially contaminated waters. Notify local health and fire officials and pollution control agencies. From a secure, explosion-proof location, use water spray to cool exposed containers. If cooling streams are ineffective (venting sound increases in volume and pitch, tank discolors or shows any signs of deforming), withdraw immediately to a secure position ... The only respirators recommended for fire fighting are self-contained breathing apparatuses that have full facepieces and are operated in a pressure-demand or

other positive-pressure mode.

5.2 Specific hazards arising from the chemical

Excerpt from ERG Guide 154 [Substances - Toxic and/or Corrosive (Non-Combustible)]: Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. Some are oxidizers and may ignite combustibles (wood, paper, oil, clothing, etc.). Contact with metals may evolve flammable hydrogen gas. Containers may explode when heated. For electric vehicles or equipment, ERG Guide 147 (lithium ion batteries) or ERG Guide 138 (sodium batteries) should also be consulted. (ERG, 2016)

5.3 Special protective actions for fire-fighters

In case of fire in the surroundings, use appropriate extinguishing media.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal protection: particulate filter respirator adapted to the airborne concentration of the substance. Sweep spilled substance into covered containers. If appropriate, moisten first to prevent dusting.

6.2 Environmental precautions

Sweep spilled substance into covered containers. If appropriate, moisten first to prevent dusting. Personal protection: particulate filter respirator adapted to the airborne concentration of the substance.

6.3 Methods and materials for containment and cleaning up

Spill handling: evacuate and restrict persons not wearing protective equipment from area of spill or leak until cleanup is complete. Remove all ignition sources. Collect powdered material in the most convenient and safe manner and deposit in sealed containers. Ventilate area of spill or lead after clean-up is complete. It may be necessary to contain and dispose of this chemical as a hazardous waste. If material or contaminated runoff enters waterways, notify downstream users of potentially contaminated waters. Contact your Department of Environmental Protection or your regional office of the federal EPA for specific recommendations.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

7.2 Conditions for safe storage, including any incompatibilities

Store at 25 deg C (77 deg F); excursions permitted to 15 to 30 deg C (59 to 86 deg F)

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure limit values

TLV: (inhalable fraction): 4 ppm as TWA.MAK: (as Ba, respirable fraction): 0.3 mg/m3; peak limitation category: II(8); pregnancy risk group: C

Biological limit values

no data available

8.2 Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Wear safety spectacles.

Skin protection

Protective gloves.

Respiratory protection

Use local exhaust or breathing protection.

Thermal hazards

no data available

SECTION 9: Physical and chemical properties and safety characteristics

Physical state	Solid.
Colour	Fine, heavy powder or polymorphous crystals
Odour	Odorless
Melting point/freezing point	1580°C

Boiling point or initial boiling point and boiling range	330°C at 760 mmHg
Flammability	Noncombustible Solid
Lower and upper explosion limit/flammability limit	no data available
Flash point	no data available
Auto-ignition temperature	no data available
Decomposition temperature	1600°C
pH	5% suspension in water is neutral to litmus paper
Kinematic viscosity	no data available
Solubility	0.0002 % at 64° F (NIOSH, 2016)
Partition coefficient n-octanol/water	no data available
Vapour pressure	0 mm Hg (approx) (NIOSH, 2016)
Density and/or relative density	>= 4.37 - <= 4.38 g/mL. Temperature:24 °C.;>= 3.08 - <= 3.97. Temperature:19.3 °C.
Relative vapour density	no data available
Particle characteristics	no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Reacts violently with aluminium powder.

10.2 Chemical stability

no data available

10.3 Possibility of hazardous reactions

Not combustible.BARIUM SULFATE is non-combustible and non-toxic. Emits toxic sulfur oxides when heated to decomposition. Can act as an oxidizing agent, but usually does not. Reacts with reducing agents such as potassium, phosphorus or aluminum (heating with aluminum can cause an explosion).

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Phosphorus, aluminum [Aluminum in the presence of heat can cause an explosion.]

10.6 Hazardous decomposition products

When heated to decomposition it emits toxic fumes of /sulfur oxides/.

SECTION 11: Toxicological information

Acute toxicity

- Oral: LD50 - rat (male) - 307 g/kg. Remarks:S.E. +/- 29 g/kg; death due to stomach rupture.
- Inhalation: no data available
- Dermal: LD50 - rat - > 2 000 mg/kg bw.

Skin corrosion/irritation

no data available

Serious eye damage/irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

STOT-single exposure

no data available

STOT-repeated exposure

Repeated or prolonged inhalation of dust particles may cause effects on the lungs. This may result in baritosis (a form of benign pneumoconiosis).

Aspiration hazard

Evaporation at 20°C is negligible; a nuisance-causing concentration of airborne particles can, however, be reached quickly.

SECTION 12: Ecological information

12.1 Toxicity

- Toxicity to fish: LC50 - Danio rerio (previous name: Brachydanio rerio) - > 3.5 mg/L - 96 h.
- Toxicity to daphnia and other aquatic invertebrates: LC50 - Daphnia magna - 14 500 µg/L - 48 h. Remarks:Metal ion -based.
- Toxicity to algae: EC50 - Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) - > 1.15 mg/L - 72 h.
- Toxicity to microorganisms: EC50 - activated sludge of a predominantly domestic sewage - > 1 000 mg/L - 3 h. Remarks:Respiration rate.

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 Other adverse effects

no data available

SECTION 13: Disposal considerations

13.1 Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

SECTION 14: Transport information

14.1 UN Number

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

14.2 UN Proper Shipping Name

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

14.3 Transport hazard class(es)

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

14.4 Packing group, if applicable

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

14.5 Environmental hazards

ADR/RID: No

IMDG: No

IATA: No

14.6 Special precautions for user

no data available

14.7 Transport in bulk according to IMO instruments

no data available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
Barium sulfate	Barium sulfate	7727-43-7	231-784-4
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
China Catalog of Hazardous chemicals 2015			Not Listed.
New Zealand Inventory of Chemicals (NZIoC)			Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Listed.
Vietnam National Chemical Inventory			Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)			Listed.
Korea Existing Chemicals List (KECL)			Listed.

SECTION 16: Other information

Information on revision

Creation Date	July 15, 2019
Revision Date	August 17, 2023

Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

References

- IPCS - The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home
- HSDB - Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm
- IARC - International Agency for Research on Cancer, website: http://www.iarc.fr/
- eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en
- CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple
- ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp
- ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg
- Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp
- ECHA - European Chemicals Agency, website: https://echa.europa.eu/

Other Information

Occurs in nature as the mineral barite; also as barytes, heavy spar.

Any questions regarding this SDS, Please send your inquiry to export@greenrockchem.com

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