SAFETY DATA SHEET (SDS / MSDS)

BARITE (BARIUM SULFATE)

Ref: ATB-MSDS-BARITE-2026-001 | Revision No: 2 | Revision Date: 18 September 2026 (Rev.01: 10 August 2026) | Prepared in accordance with GHS format

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

1.1 Product identifier

Product Name	Barite
Synonyms	Barium Sulphate, Barite
CAS No.	13462-86-7
EINECS (EC) Number	236-664-5

1.2 Relevant identified uses of the substance and uses advised against

Identified uses: industrial use — weighting agent for oil and gas drilling fluids; raw material for paints, paper coatings, linoleum, textiles, rubber and related industrial applications. Uses advised against: not for medicinal, household, food-contact or other consumer use.

1.3 Supplier identification

Company	ATABAŞ GLOBAL DIŞ TİCARET ANONİM ŞİRKETİ
Address	Huzur Mahallesi, Azerbaycan Caddesi, Skyland İstanbul 4 B Blok, 27. Kat, Daire 389-390-391, Sarıyer, İstanbul, Türkiye
Contact	Tel: +90 212 801 64 60 — E-mail: ceo@atabas.com.tr — Web: www.atabas.com.tr

1.4 Emergency telephone number

+90 212 801 64 60 (business hours)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance

Not classified as hazardous under the Globally Harmonized System (GHS).

2.2 Label elements

Pictogram(s): none. Signal word: no signal word. Hazard statement(s): none. Precautionary statement(s) — Prevention: none; Response: none; Storage: none; Disposal: none.

2.3 Other hazards

No data available. Prolonged inhalation of dust may cause irritation of the eyes, nose and upper respiratory system and, in cases of chronic heavy exposure, benign pneumoconiosis (baritosis).

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Substance / Product Name	Barite
Synonyms	Barium Sulphate, Barite
CAS No.	13462-86-7
EC Number	236-664-5
MF (Molecular Formula)	BaO4S
MW (Molecular Weight)	233.39

SECTION 4: FIRST AID MEASURES

4.1 Description of 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 and effects, both acute and delayed

Exposure routes: inhalation, skin and/or eye contact. Symptoms: irritation of eyes, nose and upper respiratory system; benign pneumoconiosis (baritosis). Target organs: eyes, respiratory system.

4.3 Indication of any immediate medical attention and special treatment needed

Ensure that adequate decontamination has been carried out. If the 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 the patient forward or place on the left side (head-down position, if possible) to maintain an open airway and prevent aspiration. Keep the patient quiet and maintain normal body temperature. Obtain medical attention.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

The product is non-combustible; use dry chemical, carbon dioxide, water spray or alcohol-resistant foam extinguishers suited to the surrounding fire. If material or contaminated runoff enters waterways, notify downstream users of potentially contaminated waters and local health, fire and pollution control agencies. From a secure, explosion-proof location, use water spray to cool exposed containers; if cooling streams are ineffective, withdraw immediately to a secure position.

5.2 Specific hazards arising from the chemical

Non-combustible; the substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. Contact with metals may evolve flammable hydrogen gas; containers may explode when heated.

5.3 Advice for firefighters

Wear a self-contained breathing apparatus (SCBA) with full facepiece, operated in pressure-demand or other positive-pressure mode, for firefighting if necessary.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing mist, gas or vapours and avoid contact with skin and eyes. Use personal protective equipment; wear chemical-impermeable gloves. Ensure adequate ventilation, remove all sources of ignition, evacuate personnel to safe areas and keep people away from and upwind of the spill/leak.

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

Evacuate and restrict persons not wearing protective equipment from the area of the 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 the area after clean-up is complete. If material or contaminated runoff enters waterways, notify downstream users of potentially contaminated waters and contact the competent environmental protection authority.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Handle 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 and prevent fire caused by electrostatic discharge.

7.2 Conditions for safe storage, including any incompatibilities

Store at 25 °C (77 °F); excursions permitted to 15–30 °C (59–86 °F). Store in a dry, sealed, well-ventilated area, away from incompatible materials (see Section 10).

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters — occupational exposure limit values

Component — Barite (Ba(SO4)), CAS No. 13462-86-7	**Exposure Limit**
Recommended Exposure Limit — 10 Hour Time-Weighted Average	10 mg/m³, total particulate
Recommended Exposure Limit — 10 Hour Time-Weighted Average	5 mg/m³, respirable fraction

Biological limit values: no data available.

8.2 Exposure controls

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

8.3 Individual protection measures

- Eye/face protection: wear tightly fitting safety goggles with side-shields conforming to EN 166 (EU) or NIOSH (US).
- Skin protection: wear fire/flame-resistant and impervious clothing. Handle with gloves; gloves must be inspected prior to use, and hands washed and dried after use. Selected protective gloves must satisfy the specifications of EU Regulation on PPE and the standard EN 374 derived from it.
- Respiratory protection: if the exposure limits are exceeded or irritation or other symptoms are experienced, use a full-face respirator.
- Thermal hazards: no data available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	White or yellowish odorless powder or small crystals
Colour	Fine, heavy powder or polymorphous crystals
Odour	Odorless
Melting Point / Freezing Point	1580 °C (with decomposition)
Boiling Point / Initial Boiling Point	330 °C at 760 mmHg
Decomposition Temperature	1600 °C
Flammability	Non-combustible solid
pH	5% suspension in water is neutral to litmus paper
Solubility	0.0002% at 64 °F; insoluble in water, dilute acids and alcohol; soluble in hot concentrated sulfuric acid
Vapour Pressure	0 mmHg (approx.)
Density and/or Relative Density	4.25 to 4.5 g/cm³
Kinematic Viscosity / Partition Coefficient / Relative Vapour Density / Particle Characteristics	No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Reacts violently with aluminium powder.

10.2 Chemical stability and possibility of hazardous reactions

Not combustible. Barium sulfate is non-combustible and non-toxic; it emits toxic sulfur oxides when heated to decomposition. It 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).

10.3 Conditions to avoid

No data available.

10.4 Incompatible materials

Phosphorus, aluminum (aluminum in the presence of heat can cause an explosion).

10.5 Hazardous decomposition products

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

SECTION 11: TOXICOLOGICAL INFORMATION

- Acute toxicity — Oral: LD50 rat, oral, approx. 307,000 mg/kg bw. Inhalation: no data available. Dermal: no data available.
- Skin corrosion/irritation, serious eye damage/irritation, respiratory or skin sensitization: no data available.
- Germ cell mutagenicity, carcinogenicity, reproductive toxicity: no data available.
- STOT-single exposure, STOT-repeated exposure, aspiration hazard: no data available.

SECTION 12: ECOLOGICAL INFORMATION

- Toxicity to daphnia and other aquatic invertebrates: EC50, Daphnia magna (Water Flea); conditions: freshwater, static, 11.5–14.5 °C, pH 7.2–7.8, dissolved oxygen 5.2–6.5 mg/L; concentration: 52,820 µg/L (43,200–68,140 µg/L) for 24 hr; effect: intoxication, immobilization.
- Toxicity to fish, algae and microorganisms: no data available.
- Persistence and degradability, bioaccumulative potential, mobility in soil, other adverse effects: no data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 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.

13.2 Contaminated packaging

Containers can be triple-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

UN Number	ADR/RID: not assigned — IMDG: not assigned — IATA: not assigned
UN Proper Shipping Name	ADR/RID: not assigned — IMDG: not assigned — IATA: not assigned
Transport Hazard Class(es)	ADR/RID: not assigned — IMDG: not assigned — IATA: not assigned
Packing Group, if applicable	ADR/RID: not assigned — IMDG: not assigned — IATA: not assigned
Environmental Hazards	ADR/RID: No — IMDG: No — IATA: No
Special Precautions for User	No data available
Transport in Bulk According to IMO Instruments	No data available

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product in question — inventory status:

Inventory	Status
European Inventory of Existing Commercial Chemical Substances (EINECS)	Listed
EC Inventory	Listed
United States Toxic Substances Control Act (TSCA) Inventory	Not Listed
China Catalog of Hazardous Chemicals 2015	Not Listed
New Zealand Inventory of Chemicals (NZIoC)	Listed
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Not Listed
Vietnam National Chemical Inventory	Listed
Inventory of Existing Chemical Substances in China (IECSC)	Listed
Korea Existing Chemicals List (KECL)	Listed

SECTION 16: OTHER INFORMATION

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 Transport Association; TWA = Time-Weighted Average; STEL = Short-Term Exposure Limit; LC50 = Lethal Concentration 50%; LD50 = Lethal Dose 50%; EC50 = Effective Concentration 50%; GHS = Globally Harmonized System.

The information in this Safety Data Sheet is applicable only to the specified product; unless otherwise specified, it is not applicable to mixtures of this product with other substances. This SDS provides safety information for users who have received appropriate professional training. Users of this SDS must make independent judgments on the applicability of this information. ATABAŞ GLOBAL DIŞ TİCARET ANONİM ŞİRKETİ makes no warranty, express or implied, and accepts no liability for its use other than as expressly agreed in a supply contract.

SANCTIONS COMPLIANCE (OFAC / EU / UK / UN)

ATABAŞ GLOBAL DIŞ TİCARET ANONİM ŞİRKETİ conducts its business in full compliance with applicable international sanctions regimes, including those administered by the U.S. Office of Foreign Assets Control (OFAC), the European Union, the United Kingdom (OFSI) and the United Nations Security Council.

ATABAŞ does not work with sanctioned countries, sanctioned entities or sanctioned individuals, and does not source, sell, ship, finance or otherwise facilitate transactions involving any party subject to such sanctions. All transactions are screened accordingly.

For and on behalf of ATABAŞ GLOBAL DIŞ TİCARET ANONİM ŞİRKETİ

Mr. Hakan Atabaş — Chairman of the Board / CEO

Signature / Stamp: _____