

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



11920 Baryte, natural barium sulfate

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Revised edition: 01.04.2026

Version: 1

Printed: 20.04.2026

1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1. Product Identifier

Product Name: Baryte, natural barium sulfate

Article No.: 11920

UFI:

1.2. Relevant identified Uses of the Substance or Mixture and Uses advised against

Identified uses:

Manufacture of pigments

Manufacture of paints and coatings

Uses advised against:

1.3. Details of the Supplier of the Safety Data Sheet (Producer/Importer)

Company: Kremer Pigmente GmbH & Co. KG

Address: Hauptstr. 41-47, 88317 Aichstetten, Germany

Tel./Fax.: Tel +49 7565 914480, Fax +49 7565 1606

Internet: www.kremer-pigmente.com

EMail: info@kremer-pigmente.com

Importer: --

1.4. Emergency No.

Emergency No.: +49 7565 914480 (Mon-Fri 8:00 - 17:00)

1.4.2 Poison Center:

2. Hazards Identification

2.1. Classification of the Substance or Mixture

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

This product does not require classification and labelling as hazardous according to CLP/GHS.

Possible Environmental Effects:

2.2. Label Elements

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

No classification required according to the CLP/GHS guidelines.

Hazard designation:

Not applicable.

Signal word:

Hazard designation:

Safety designation:

Hazardous components for labelling:

2.3. Other Hazards

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3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

Chemical Characterization: Natural barium sulfate, C.I. Pigment White 22

Information on Components / Hazardous Ingredients:

Barium sulfate, REACH Reg. No.
01-2119491274-35-0000

> 99 %

CAS-Nr: 7727-43-7
EINECS-Nr: 231-784-4
EC-Nr:

Additional information:

4. First Aid Measures

4.1. Description of the First Aid Measures

General information:

Seek medical attention in case of complaints.

After inhalation:

Supply fresh air and keep patient calm.

After skin contact:

Wash off with plenty of water.

After eye contact:

Rinse open eyes with plenty of water for at least 15 minutes.

After ingestion:

After swallowing larger amount of product seek medical aid.

Never give anything by mouth to an unconscious person.

4.2. Most important Symptoms and Effects, both Acute and Delayed

Symptoms:

Inhalation: can cause irritation of nose, throat and trachea.

Eye contact: may irritate the eyes.

Swallowing: may cause stomach irritation, nausea, vomiting and diarrhea.

Effects:

4.3. Indication of any Immediate Medical Attention and special Treatment needed

Treatment:

In case of ingestion, contact physician immediately.

5. Fire-Fighting Measures

5.1. Extinguishing Media

Suitable extinguishing media:

Use extinguishing media for surrounding fire.

Product itself does not burn.

Unsuitable extinguishing media:

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5.2. Special Hazards arising from the Substance or Mixture

Special hazards:

Product is not flammable.

5.3. Advice for Firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Further information:

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

Wear protective clothing.

Avoid formation of dust.

6.2. Environmental Precautions

Environmental precautions:

Prevent contamination of soil, drains and surface waters.

6.3. Methods and Material for Containment and Cleaning Up

Methods and material:

Take up mechanically and collect in suitable containers for disposal. Avoid dust formation.

6.4. Reference to other Sections

7. Handling and Storage

7.1. Precautions for Safe Handling

Instructions on safe handling:

Provide adequate ventilation.

Avoid formation of dust.

Hygienic measures:

7.2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

Store dry and in the original tightly sealed containers.

Requirements for storage areas and containers:

Suitable container material: paper, polyethylene.

Information on fire and explosion protection:

Storage class:

13; Non combustible solids (TRGS 510)

Further Information:

7.3. Specific End Use(s)

Further information:

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8. Exposure Controls/Personal Protection

8.1. Parameters to be Controlled

Parameters to be controlled (DE):

Barium sulfate: TWA: Average value (8h): 1.25 mg/m³ (airborne fraction); 10 mg/m³ (inhalable fraction); Short-term value (15 min): 2.5 mg/m³ (airborne fraction); 20 mg/m³ (inhalable fraction)

Parameters to be controlled:

TWA (ACGIH) Threshold Limit Values (USA): 5 mg/m³

Derived No-Effect Level (DNEL):

10 mg/m³ (worker, inhalation, long-term exposure - systemic and local effects)

10 mg/m³ (consumer, inhalation, long-term exposure - systemic effects)

13000 mg/kg bw/d (consumer, swallowing, long-term exposure - systemic effects)

PNEC (Predicted No-Effect Concentration):

Barium sulfate:

Fresh water: 115 µg/l

Fresh water sediment: 600.4 mg/kg

Soil: 207.7 mg/kg

Sewage treatment system (STP): 62.2 mg/l

Additional Information:

8.2. Exposure Controls

Technical protective measures:

Ensure adequate ventilation, especially in confined areas.

Facilities storing or utilizing this material should be equipped with an eyewash facility or eyewash bottle.

Personal Protection

General protective measures:

Keep away from foodstuffs and drinks. Do not eat, drink or smoke during work. Wash hands before breaks and at the end of work.

Respiratory protection:

If exposure limit is exceeded: Mask P3 (for solid and liquid particles DIN 3181).

Hand protection:

Protective gloves

Protective glove material:

Natural rubber (NR), polyvinyl chloride (PVC).

Eye protection:

Tightly fitting safety goggles (EN 166).

Body protection:

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Protective suit with long sleeves.

Environmental precautions:

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

<i>Form:</i>	<i>powder</i>
<i>Color:</i>	<i>white</i>
<i>Odor:</i>	<i>odorless</i>
<i>Odor threshold:</i>	<i>not determined</i>
<i>pH-Value:</i>	<i>9 (20°C)</i>
<i>Melting temperature:</i>	<i>not applicable</i>
<i>Boiling temperature:</i>	<i>not applicable</i>
<i>Flash point:</i>	<i>not applicable</i>
<i>Evaporation rate:</i>	<i>not applicable</i>
<i>Flammability (solid, gas):</i>	<i>not flammable</i>
<i>Upper explosion limit:</i>	<i>no information available</i>
<i>Lower explosion limit:</i>	<i>no information available</i>
<i>Vapor pressure:</i>	<i>not applicable</i>
<i>Vapor density:</i>	<i>No information available.</i>
<i>Density:</i>	<i>4.5 g/cm³ (15°C)</i>
<i>Solubility in water:</i>	<i>insoluble</i>
<i>Coefficient of variation (n-Octanol/Water):</i>	<i>not applicable</i>
<i>Auto-ignition temperature:</i>	<i>not applicable</i>
<i>Decomposition temperature:</i>	<i>> 1600°C</i>
<i>Viscosity, dynamic:</i>	<i>not applicable</i>

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Explosive properties:

Product does not present an explosion hazard.

Oxidizing properties:

not oxidizing

Bulk density:

600 - 1000 kg/m³

9.2. Further Information

Solubility in solvents:

Viscosity, kinematic:

Burning class:

Solvent content:

Solid content:

Particle size:

Other information:

10. Stability and Reactivity

10.1. Reactivity

Stable if used according to specifications.

10.2. Chemical Stability

Stable if used according to specifications.

10.3. Possibility of Hazardous Reactions

Unknown.

10.4. Conditions to Avoid

Conditions to avoid:

Do not overheat.

Avoid heat, hot surfaces, sparks, naked flames and other ignition sources. Do not smoke.

Thermal decomposition:

10.5. Incompatible Materials

Reducing agents

Aluminum

10.6. Hazardous Decomposition Products

Sulphur oxides, barium oxide.

10.7. Further Information

11. Toxicological Information

11.1. Information on Hazard Classes as defined in Regulation (EC) No. 1272/2008

Acute Toxicity

LD₅₀, oral: > 5000 mg/kg (rat, m; OECD 401)

LD₅₀, dermal: > 2000 mg/kg (rat)

LC₅₀, inhalation:

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No information available.

Primary effects

Irritant effect on skin:

Non irritating

Irritant effect on eyes:

Non-irritating to eyes (rabbit; OECD 405)

Inhalation:

No information available.

Ingestion:

No information available

Sensitization:

Non sensitizing (mouse; OECD 429).

Mutagenicity:

No relevant data found.

Reproductive toxicity:

No relevant data found.

Carcinogenicity:

No cancerogenic effect (rat).

Teratogenicity:

No relevant data found.

Specific target organ toxicity (STOT):

*Single exposure: no organospecific toxicity expected.
Repeated exposure: no organospecific toxicity expected.
NOAEL (oral): > 104 mg/kg (90d, rat m/f)*

Aspiration hazard:

No information available.

11. 2. Information on other Hazards

Endocrine Disrupting Properties:

This substance/mixture does not contain any components with endocrine disrupting properties in a percentage of 0.1 or greater, according to Article 57(f) of the REACH Regulation (EC) No. 1907/2006 or the Delegated Regulation (EC) 2017/2100 or the Delegated Regulation (EC) 2018/605.

12. Ecological Information

12. 1. Aquatic Toxicity

The product is biologically inert.

Fish toxicity:

LC50: >3.5 mg/l (96h, Danio rerio; OECD 203); NOEC: > 1.26 mg/l (33d, Danio rerio; OECD 210)

Daphnia toxicity:

EC50: 14.5 mg/l (48h, Daphnia magna; OECD 202); NOEC: 2.9

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mg/l (21d, Daphnia magna; OECD 211)

Bacteria toxicity:

NOEC: 622 mg/l (3h, active sludge; OECD 209)

Toxicity to soil dwelling organisms:

Barium sulfate: NOEC: 258 mg/kg (21d, Eisenia fetida); NOEC: 211 mg/kg (28d, Folsomia candida, Lit.)

Algae toxicity:

ErC50: > 1.15 mg/l; NOEC: >1.15 mg/l (72h, Pseudokirchneriella subcapitata; OECD 201)

12. 2. Persistency and Degradability

Method is not applicable for inorganic substances.

12. 3. Bioaccumulation

Bioaccumulation is not to be expected.

12. 4. Mobility

Weak solubility and mobility.

12. 5. Results of PBT- und vPvP Assessment

According to Annex VIII to Regulation (EC) No. 1907/2006 (REACH): not applicable for inorganic substances.

12. 6. Endocrine Disrupting Properties

This substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated Regulation (EU) No. 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1 % or higher.

12. 7. Other Adverse Effects

Water hazard class:

Not hazardous.

Behaviour in sewage systems:

Further ecological effects:

Barium sulfate: No toxicity at the solubility limit.

AOX Value:

13. Disposal Considerations

13. 1. Waste Treatment Methods

Product:

Dispose of according to official national and local regulations.

European Waste Code (EWC):

Uncleaned packaging:

Dispose of according to official local regulations.

Waste Code No.:

14. Transport Information

14. 1. UN Number

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ADR, IMDG, IATA

14. 2. UN Proper Shipping Name

ADR/RID:

No hazardous goods according to ADR / DOT (US) (land transportation).

IMDG/IATA:

Not hazardous goods

14. 3. Transport Hazard Classes

ADR Class:

not applicable

Hazard no.:

Classification code:

Tunnel restriction code:

IMDG Class (sea):

not applicable

Hazard no.:

EmS No.:

IATA Class:

not applicable

Hazard no.:

14. 4. Packaging Group

ADR/RID:

not applicable

IMDG:

IATA:

14. 5. Environmental Hazards

Not classified as environmentally hazardous.

14. 6. Special Precautions for User

Not classified as a dangerous good under transport regulations.

14. 7. Maritime Transport in Bulk according to IMO Instruments

not applicable

14. 8. Further Information

15. Regulatory Information

15. 1. Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture

Water hazard class:

0, not hazardous (German Regulation)

Local regulations on chemical accidents:

Employment restrictions:

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Restriction and prohibition of application:

Barium sulfate:

EC. REACH, Section XVII, Restrictions on the Manufacture, Placing on the Market and Use of Certain Dangerous Substances, Preparations and Articles, Registered no. 75

Technical instructions on air quality:

15. 2. Chemical Safety Assessment

A Chemical Safety Assessment is not necessary for this product.

15. 3. Further Information

Listed in the following inventories:

TSCA (US), REACH (EU), DSL (CA), CSCL (JP), KECI (KR), PICCS (PH), IECSC (CN), AICS (AUS), NZIoC (NZ), TCSI (TW)

16. Other Information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.