

Safety Data Sheet

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



46100 Lithopone

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Revised edition: 22.12.2022

Version: 4.3

Printed: 11.05.2023

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

1.1. Product Identifier

Product Name: Lithopone

Article No.: 46100

UFI: --

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

Identified uses:
Additive, fillers, colorants, pigments

Uses advised against:
Not for cosmetics, foods additives, medicine, feed additives, permanent implants

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

E-Mail: 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)

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

Hazard designation:
Not applicable.

Signal word:

Hazard designation:

Safety designation:

Hazardous components for labelling:

Other Hazards

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2.3. *Dust may be produced when working with this material, which can cause a mechanical irritation of eyes, nose and respiratory tract.*

3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

Chemical Characterization: Artificial mineral pigment, co-precipitate of zinc sulphide and barium sulphate, Pigment White 5, C.I. 77115

Information on Components / Hazardous Ingredients:

Zinc sulphide, ZnS; REACH Reg. No. 01-2119474779-15-0000	> 60 %	CAS-Nr: 1314-98-3 EINECS-Nr: 215-251-3 EC-Nr:
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Barium sulfate, REACH Reg. No. 01-2119491274-35-0000	> 40 %	CAS-Nr: 7727-43-7 EINECS-Nr: 231-784-4 EC-Nr:
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Additional information:

4. First Aid Measures

4.1. Description of the First Aid Measures

General information:

Consult physician.

After inhalation:

Supply fresh air. Consult physician if symptoms persist.

After skin contact:

*Wash off with plenty of water and soap.
If symptoms persist, consult a physician.*

After eye contact:

*Rinse eyes with water.
Seek medical attention if irritation persists.*

After ingestion:

*Rinse mouth with water and drink plenty of water.
Do not induce vomiting without medical advice.
If symptoms persist consult physician.*

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

Symptoms:

*Eye contact: can cause mechanical irritation.
Inhalation (increased exposition): coughing, shortness of breath, feeling of tightness in the chest, sore throat.
Skin contact: prolonged contact may cause dryness of the skin.*

Effects:

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

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Treatment:

No further information available.

5. Fire-Fighting Measures

5.1. Extinguishing Media

Suitable extinguishing media:

*Use extinguishing media for surrounding fire.
Foam, carbon dioxide (CO₂), extinguishing powder, water mist.*

Unsuitable extinguishing media:

Water with full jet.

5.2. Special Hazards arising from the Substance or Mixture

Special hazards:

In case of fire: formation of sulfuric acids and metal oxides.

5.3. Advice for Firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Further information:

Cool closed containers exposed to fire with water mist.

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

*Wear appropriate protective equipment. Keep spectators away.
Do not inhale dust. Avoid formation of dust.
Avoid contact with eyes.*

6.2. Environmental Precautions

Environmental precautions:

Prevent contamination of soils, drains and surface water.

6.3. Methods and Material for Containment and Cleaning Up

Methods and material:

Take up mechanically and collect in suitable containers for disposal.

6.4. Reference to other Sections

For information for safe handling see Section 7.

Protective clothing, see Section 8.

See Section 13 for information on disposal.

7. Handling and Storage

7.1. Precautions for Safe Handling

Instructions on safe handling:

*Provide adequate ventilation.
Avoid formation of dust. Do not inhale dust.*

Hygienic measures:

*Avoid contact with skin, eyes and clothing. Do not inhale dust.
Do not eat or drink during work. Do not smoke.*

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7.2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

*Store in closed container and keep product dry.
Electric equipment have to comply with the technological safety standards.*

Requirements for storage areas and containers:

Water law provisions have to be met.

Information on fire and explosion protection:

*No special measures necessary.
Do not store together with: foodstuffs and animal feed.*

Storage class:

13; Non combustible solids (TRGS 510)

Further Information:

7.3. Specific End Use(s)

Further information:

No information available.

8. Exposure Controls/Personal Protection

8.1. Parameters to be Controlled

Parameters to be controlled (DE):

*TRGS 900
Zinc sulphide (CAS 1314-98-3), TLV: 0.1 mg/m³ (airborne); 2 mg/m³ (inhalable)
Barium sulfate: TLV: 1.25 mg/m³ (airborne); 10 mg/m³ (inhalable); 2(II)*

Parameters to be controlled:

Derived No-Effect Level (DNEL):

*Zinc sulphide (1314-98-3):
5 mg/m³ (worker, inhalation, long-term exposure - systemic effects)
83 mg/kg (worker, skin contact, long-term exposition - systemic effects)
2.5 mg/m³ (consumer, inhalation, long-term exposure - systemic effects)
83 mg/kg (consumer, skin contact, long-term exposure - systemic effects)
0.83 mg/kg (consumer, swallowing, long-term exposition - systemic effects)
Barium sulphate:
10 mg/m³ (worker/consumer, inhalation, long-term exposure - systemic effects)
13000 mg/kg bw/d (consumer, swallowing, long-term exposure - systemic effects)*

Predicted No-Effect Concentration (PNEC):

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Zinc sulphide (1314-98-3):
Fresh water: 20.6 µg/l
Fresh water sediment: 117.8 mg/kg
Seawater: 6.1 µg/l
Seawater sediment: 56.5 mg/kg
Soil: 35.6 mg/kg
Sewage treatment system (STP): 100 mg/l
Barium sulfate:
Fresh water: 115 µg/l
Fresh water sediment: 600.4 mg/kg
Sewage treatment system (STP): 62.2 mg/l
Soil: 207.7 mg/kg

Additional Information:

8.2. Exposure Controls

Technical protective measures:

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

Personal Protection

General protective measures:

Wash hands before breaks and after work.
Avoid contact with eyes.
Do not inhale dust.
Avoid contact with skin.

Respiratory protection:

None required under normal operating conditions.

Hand protection:

Protective gloves (EN 374)

Protective glove material:

Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material and dexterity. Always seek advice from glove suppliers.

Eye protection:

Safety glasses (EN 166)

Body protection:

Environmental precautions:

Do not allow entering sewerage system.

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

Form: powder
Color: white
Odor: odorless
Odor threshold:

no information available

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<i>pH-Value:</i>	7
<i>Melting temperature:</i>	> 800°C
<i>Boiling temperature:</i>	not determined
<i>Flash point:</i>	not applicable
<i>Evaporation rate:</i>	not applicable
<i>Flammability (solid, gas):</i>	Formation of explosive dust-air mixtures are not expected.
<i>Upper explosion limit:</i>	not determined
<i>Lower explosion limit:</i>	not determined
<i>Vapor pressure:</i>	not applicable
<i>Vapor density:</i>	No information available.
<i>Density:</i>	4.3 g/cm ³ (20°C)
<i>Solubility in water:</i>	0.01 g/l (20°C)
<i>Auto-ignition temperature:</i>	No information available.
<i>Decomposition temperature:</i>	not determined
<i>Viscosity, dynamic:</i>	not applicable
<i>Explosive properties:</i>	no information available
<i>Oxidizing properties:</i>	no information available
<i>Bulk density:</i>	not determined

9.2. Further Information

Solubility in solvents:

Viscosity, kinematic:

Burning class:

Solvent content:

Solid content:

Particle size: 0.3 - 1 µm

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Other information:

No further 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

Dust can form explosive mixtures with air.

10.4. Conditions to Avoid

Conditions to avoid:

Avoid temperatures above 800°C.

pH Value < 5

Thermal decomposition:

Avoid heat.

10.5. Incompatible Materials

Strong reducing agents.

Acids

10.6. Hazardous Decomposition Products

Sulphur oxides (SO_x).

Hydrogen sulfide gas.

Metal oxides.

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:

Zinc sulphide (1314-98-3): > 15000 mg/kg (rat; OECD 401)

Barium sulphate: > 5000 mg/kg (rat; OECD 401)

LD50, dermal:

No adverse effects expected.

LC50, inhalation:

Zinc sulphide (1314-98-3): > 5.7 mg/kg (4h, rat; OECD 403)

Primary effects

Irritant effect on skin:

Zinc sulphide: no irritating effect

Barium sulphate: no irritating effect

Irritant effect on eyes:

Zinc sulphide: no irritating effect

Barium sulphate: no irritating effect (rabbit; OECD 405)

Inhalation:

No information available.

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Ingestion:

No information available

Sensitization:

Zinc sulphide: does not cause any respiratory sensitization.
Barium sulfate: no sensitization caused (mouse; OECD 429)

Mutagenicity:

Barium sulphate:
In vitro genetic-toxicity: negative (OECD 476, mouse lymphoma cells)
In vitro genetic-toxicity: Ames-Test negative (OECD 471)
In vitro Mammalian Chromosomal Aberration Test (OECD 473): negative

Reproductive toxicity:

No reproductive toxicity expected.

Carcinogenicity:

Not cancerogenic.
Barium sulphate: 60 - 75 mg/kg: negative (rat (m/f), oral, 104 weeks; Method: OPPTS 870.4200); 160 - 200 mg/kg: negative (mouse (m/f), oral; Method: OPPTS 870.4200)

Teratogenicity:

No information available.

Specific target organ toxicity (STOT):

Single exposure: no organospecific toxicity expected.
Repeated exposure: no organospecific toxicity expected.
Zinc sulphide:
Repeated exposure: Swallowing; Target organs: brain, thyroid gland, thymus, eyes, pituitary gland, kidneys, liver, spleen, adrenal glands, testicles, female reproductive organs, muscle. Evaluation: no significant effects at a concentration of 300 mg/kg bw/day.
Barium sulphate: Repeated exposure (swallowing): NOAEL: 104 mg/kg (rat)

Aspiration hazard:

No risk of aspiration.

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

Fish toxicity:

Zinc sulphide: EC50: 100 mg/l (96h, Danio rerio; OECD 203)
Barium sulphate: LC50: no toxicity (96h, Danio rerio; OECD 203)

Daphnia toxicity:

Zinc sulphide: EC50: 100 mg/l (48h, Daphnia magna; OECD 202)

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Barium sulphate: LC50: no toxicity (48h, Daphnia magna; OECD 202); NOEC: no toxicity (21d, Daphnia magna; OECD 211)

Bacteria toxicity:

no information available

Algae toxicity:

Zinc sulphide: EC50: 100 mg/l (72h, Desmodesmus subspicatus; OECD 202)

Barium sulphate: EC50: > 1.92 mg/l (72h; OECD 201)

12. 2. Persistency and Degradability

Methods for the evaluation of the biological degradability are not applicable for inorganic substances.

12. 3. Bioaccumulation

No bioaccumulation expected.

12. 4. Mobility

No information available.

12. 5. Results of PBT- und vPvP Assessment

On the basis of available data, the product does not contain any PBT or vPvB substances in percentage greater than 0.1 %.

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:

AOX Value:

13. Disposal Considerations

13. 1. Waste Treatment Methods

Product:

*Dispose of according to official national and local regulations.
Do not let product enter water systems.*

European Waste Code (EWC):

Uncleaned packaging:

Dispose of according to official local regulations.

Waste Code No.:

14. Transport Information

14. 1. UN Number

ADR, IMDG, IATA

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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

None

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

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 (according to the German Regulation AwSV)

Local regulations on chemical accidents:

Employment restrictions:

Restriction and prohibition of application:

EC. REACH, Section XVII, Restrictions on the Manufacture, Placing on the Market and Use of Certain Dangerous Substances,

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Preparations and Articles: not applicable

Technical instructions on air quality:

15.2. Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for the component substances contained in this product.

EC SVHC-List: This product does not contain a substance in the candidate list for substances of very high concern (REACH Regulation (EC) 1907/2006, Article 57)

15.3. Further Information

EC. REACH, Annex XIV, Candidate List of Substances of very High Concern (SVHC): not regulated / not applicable

Regulation (EC) 1005/2009 - Substances that Deplete the Ozone Layer: not regulated / not applicable

Regulation (EC) 850/2004 - Persistent Organic Pollutants and amending Directive 79/117/EEC: not regulated / not applicable

Listed in the following inventories:

TSCA (US), AICS (AUS), DSL (CA), ENCS (JP), KECI (KR), PICCS (PH), NZIoC (NZ), IECSC (CN), TSCI (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.