

## SAFETY DATA SHEET

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Die in diesem Produktdatenblatt genannten Spezifikationen dienen nur zur Produktbeschreibung und beziehen sich auf den Zeitpunkt unmittelbar nach der Produktion bzw. Import des Produktes. Sie entsprechen den Angaben des Herstellers. Eine rechtsverbindliche Zusicherung bestimmter Eigenschaften oder der Eignung für einen bestimmten Einsatzzweck kann hieraus nicht abgeleitet werden. Durch unsachgemäßen Transport und / oder unsachgemäße Lagerung können sich Änderungen ergeben. Die Angaben in diesem Produktdatenblatt entbinden den Verarbeiter nicht von eigener Prüfung der Eigenschaften des Produktes und dessen Eignung für die vorgesehene Verwendung.

# Safety Data Sheet

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

# deffner & Johann

1425 000  
1425 120

**Lithopone Silver Seal 60 %**

Page 1

Revised edition: 18.07.2019

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

### 1.1. Product Identifier

*Product Name:* Lithopone

*Article No.:* 46100

*UFI:*

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### 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:* Deffner & Johann GmbH

*Address:* Mühläckerstraße 13, D-97520 Röthlein, Germany

*Tel./Fax.:* Tel. +49 9723 9350-0, Fax +49 9723 9350-25

*Internet:* www.deffner-johann.de

*E-Mail:* info@deffner-johann.de

*Importer:*

### 1.4. Emergency No.

*Emergency No.:* Tel. +49 9723 9350-0 (Mo. - Fr.: 8:00 - 15:00 Uhr)

#### 1.4.2 Poison Center:

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## 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:*

next page: 2

# Safety Data Sheet

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1425 000  
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Page 2

Revised edition: 18.07.2019

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---

## 2.3. Other Hazards

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## 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 sulphate, 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:*

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## 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

*Treatment:*

*No further information available.*

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next page: 3

# Safety Data Sheet

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

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Page 3

Revised edition: 18.07.2019

Version: 4.0

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---

## 5. Fire-Fighting Measures

### 5.1. Extinguishing Media

*Suitable extinguishing media:*

*Use extinguishing media for surrounding fire.*

*Foam, carbon dioxide (CO<sub>2</sub>), extinguishing powder, water spray jet.*

*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.*

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## 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.*

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## 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.*

next page: 4

# Safety Data Sheet

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

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1425 000  
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Page 4

Revised edition: 18.07.2019

Version: 4.0

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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.*

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## 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/m<sup>3</sup> (airborne); 2 mg/m<sup>3</sup> (inhalable)  
Barium sulphate: AGW: 1.25 mg/m<sup>3</sup> (airborne); 10 mg/m<sup>3</sup> (inhalable); 2(II)*

*Parameters to be controlled:*

*Derived No-Effect Level (DNEL):*

*Zinc sulphide (1314-98-3):  
5 mg/m<sup>3</sup> (worker, inhalation, long-term exposure - systemic effects)  
83 mg/kg (worker, skin contact, long-term exposition - systemic effects)  
2.5 mg/m<sup>3</sup> (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/m<sup>3</sup> (worker/consumer, inhalation, chronic effects - systemic)  
13000 mg/kg bw/d (consumer, swallowing, chronic effects - systemic)*

*Predicted No-Effect Concentration (PNEC):*

next page: 5

# Safety Data Sheet

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

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Page 5

Revised edition: 18.07.2019

Version: 4.0

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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 sulphate:*

*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.*

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## 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*

next page: 6

## Safety Data Sheet

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

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1425 000  
1425 120

**Lithopone Silver Seal 60 %**

Page 6

Revised edition: 18.07.2019

Version: 4.0

Printed: 18.05.2021

---

<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>	not applicable
<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 <sup>3</sup> (20°C)
<i>Solubility in water:</i>	0.01 g/l (20°C)
<i>Coefficient of variation (n-Octanol/Water):</i>	not determined
<i>Auto-ignition temperature:</i>	No information available.
<i>Decomposition temperature:</i>	not determined
<i>Viscosity, dynamic:</i>	not applicable
<i>Explosive properties:</i>	Dust can form explosive mixtures with air.
<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:*

next page: 7

# Safety Data Sheet

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

# deffner & Johann

1425 000  
1425 120

**Lithopone Silver Seal 60 %**

Page 7

Revised edition: 18.07.2019

Version: 4.0

Printed: 18.05.2021

---

*Solid content:*

*Particle size:*

*Other information:*

*No further information.*

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## 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<sub>x</sub>).  
Hydrogen sulfide gas.  
Metal oxides.*

### 10.7. Further Information

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## 11. Toxicological Information

### 11.1. Information on Toxicological Effects

*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)*



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1425 120

**Lithopone Silver Seal 60 %**

Page 8

Revised edition: 18.07.2019

Version: 4.0

Printed: 18.05.2021

---

*Inhalation:*

No information available.

*Ingestion:*

No information available

*Sensitization:*

No sensitizing effects known.

*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.*

*Barium sulphate: Repeated exposure (swallowing): NOAEL: 104 mg/kg (rat)*

*Additional toxicological information:*

No health impairments known or expected when used according to specifications.

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## 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)*

*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)*

next page: 9

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1425 000  
1425 120

**Lithopone Silver Seal 60 %**

Page 9

Revised edition: 18.07.2019

Version: 4.0

Printed: 18.05.2021

---

## 12.2. Persistence 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. Other Adverse Effects

*Water hazard class:*

*Not hazardous.*

*Behaviour in sewage systems:*

*Further ecological effects:*

*AOX Value:*

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## 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.:*

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## 14. Transport Information

### 14.1. UN Number

*ADR, IMDG, IATA*

### 14.2. UN Proper Shipping Name

*ADR/RID:*

*No hazardous goods according to ADR (land transportation).*

*IMDG/IATA:*

*No hazardous goods according to IMDG.*

### 14.3. Transport Hazard Classes

*ADR Class:*

*not applicable*

*Hazard no.:*

*Classification code:*

*Tunnel restriction code:*

*IMDG Class (sea):*

next page: 10

## Safety Data Sheet

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

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1425 000  
1425 120

**Lithopone Silver Seal 60 %**

Page 10

Revised edition: 18.07.2019

Version: 4.0

Printed: 18.05.2021

---

*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. Transportation in Bulk according to Annex II of MARPOL 73/78 and IBC-Code

#### 14. 8. Further Information

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### 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:*

*Restriction and prohibition of application:*

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

*Listed in the following inventories:*

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

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### 16. Other Information

*This product should be stored, handled and used in accordance*

*next page: 11*

## Safety Data Sheet

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Page 11

Revised edition: 18.07.2019

Version: 4.0

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---

*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.*