

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : Eco-Mischpulver EP/PE 5662  
Revision date : 16.06.2023  
Print date : 16.06.2023

Version (Revision) : 6.0.0 (5.0.0)

## SECTION 1: Identification of the substance/mixture and of the company/ undertaking

### 1.1 Product identifier

Eco-Mischpulver EP/PE 5662

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Powder coating. Intended purpose see technical data sheet.

#### Relevant identified uses

##### Products Category [PC]

Coatings and paints, thinners, paint removers

#### Remark

The product is intended for professional use.

### 1.3 Details of the supplier of the safety data sheet

#### Supplier

Brillux GmbH & Co. KG, Industrielack  
www.brillux-industrielack.de

**Street :** Otto-Hahn-Straße 14

**Postal code/City :** D-59423 Unna (Germany)

**Telephone :** +49 2303 8805-0

**Telefax :** +49 2303 8805-119

**Information contact :** E-mail address of the competent person for safety data sheets: sdb@brillux-industrielack.de

### 1.4 Emergency telephone number

Giftinformationszentrum-Nord (poisons centre), consultation in german and english  
Telephone: +49 551 19 24 0

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008 [CLP]

Aquatic Chronic 3 ; H412 - Hazardous to the aquatic environment : Chronic 3 ; Harmful to aquatic life with long lasting effects.

### 2.2 Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

##### Hazard statements

H412 Harmful to aquatic life with long lasting effects.

##### Precautionary statements

P260 Do not breathe dust.

P273 Avoid release to the environment.

##### Special rules for supplemental label elements for certain mixtures

EUH208 Contains ZINC DI(BENZOTHIAZOL-2-YL) DISULPHIDE ; BENZENE-1,2,4-TRICARBOXYLIC ACID 1,2-ANHYDRIDE. May produce an allergic reaction.

EUH212 Warning! Hazardous respirable dust may be formed when used. Do not breathe dust.

### 2.3 Other hazards

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria. The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

## SECTION 3: Composition/information on ingredients

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## 3.2 Mixtures

### Hazardous ingredients

ZINC DI(BENZOTHAZOL-2-YL) DISULPHIDE ; REACH No. : 01-2119493020-50 ; EC No. : 205-840-3; CAS No. : 155-04-4

Weight fraction :  $\geq 0,5 - < 1 \%$

Classification 1272/2008 [CLP] : Skin Sens. 1 ; H317 Aquatic Acute 1 ; H400 Aquatic Chronic 1 ; H410 (M=1)

BENZENE-1,2,4-TRICARBOXYLIC ACID 1,2-ANHYDRIDE ; EC No. : 209-008-0; CAS No. : 552-30-7

Weight fraction :  $\geq 0,1 - < 0,5 \%$

Classification 1272/2008 [CLP] : Resp. Sens. 1 ; H334 Eye Dam. 1 ; H318 Skin Sens. 1 ; H317 STOT SE 3 ; H335

**Contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH**

BENZENE-1,2,4-TRICARBOXYLIC ACID 1,2-ANHYDRIDE ; EC No. : 209-008-0; CAS No. : 552-30-7

### Additional information

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General information

When in doubt or if symptoms are observed, get medical advice. Change contaminated, saturated clothing. If unconscious but breathing normally, place in recovery position and seek medical advice.

#### Following inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. In case of respiratory tract irritation, consult a physician.

#### In case of skin contact

Wash immediately with: Water and soap Do not wash with: Solvents/Thinner

#### After eye contact

Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist.

#### Following ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Keep at rest. Do NOT induce vomiting. No direct artificial respiration to be given by first aider.

### 4.2 Most important symptoms and effects, both acute and delayed

Allergic symptoms.

### 4.3 Indication of any immediate medical attention and special treatment needed

None

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Extinguishing powder, alcohol resistant foam, carbon dioxide (CO<sub>2</sub>), water spray. For fire fighting in manual or automatic powder coating systems in accordance with BGI 764, the extinguishing agent CO<sub>2</sub> can be used in mobile devices and stationary fire extinguishing systems in accordance with the recognised rules of technology. When using extinguishing agents other than CO<sub>2</sub>, the extinguishing effectiveness must be proven.

#### Unsuitable extinguishing media

Full water jet, inert gas with high pressure.

### 5.2 Special hazards arising from the substance or mixture

#### Hazardous combustion products

In case of fire may be liberated: Nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>) and pyrolysis products, toxic.

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## 5.3 Advice for firefighters

### Special protective equipment for firefighters

Use suitable breathing apparatus.

## 5.4 Additional information

Burning produces heavy smoke. Use water spray jet to protect personnel and to cool endangered containers. Do not allow run-off from fire-fighting to enter drains or water courses.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. See protective measures under point 7 and 8. Avoid dust formation. Do not inhale product dusts.

### 6.2 Environmental precautions

Do not allow to enter into surface water or drains.

### 6.3 Methods and material for containment and cleaning up

#### For cleaning up

Take up dust-free and set down dust-free. Use approved industrial vacuum cleaner for removal. (Vacuum cleaner type B1, suitable for vacuuming up combustible dust of dust explosion class St1 and St2 in zone 11). Treat the recovered material as prescribed in the section on waste disposal.

### 6.4 Reference to other sections

None

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Protective measures

Avoid: Generation/formation of dust, dust deposits, inhalation of dust/particles. Only use the material in places where open light, fire and other flammable sources can be kept away. If handled uncovered, arrangements with local exhaust ventilation should be used if possible. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means.

#### Measures to prevent fire

Dust can form an explosive mixture with air. Take precautionary measures against static discharges. Wear anti-static footwear and clothing Use only antistatically equipped (spark-free) tools.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Floors should be impervious and easy to clean.

#### Hints on joint storage

Storage class (TRGS 510) : 11

#### Do not store together with

Strong acid, strong alkali, oxidising agent, food and feedingstuffs.

#### Further information on storage conditions

Do not store at temperatures above : 25 °C

Protect against : Humidity.

### 7.3 Specific end use(s)

Powder coating. Intended purpose see technical data sheet.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limit values

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BENZENE-1,2,4-TRICARBOXYLIC ACID 1,2-ANHYDRIDE ; CAS No. : 552-30-7

Limit value type (country of origin) : TRGS 900 ( D )  
Parameter : A: respirable fraction  
Limit value : 0,04 mg/m<sup>3</sup>  
Peak limitation : 1(I)  
Remark : Sa  
Version : 23.06.2022

#### GENERAL LIMIT VALUE FOR DUST

Limit value type (country of origin) : TRGS 900 ( D )  
Parameter : A: respirable fraction  
Limit value : 1,25 mg/m<sup>3</sup>  
Peak limitation : 2(II)  
Version : 23.06.2022

Limit value type (country of origin) : TRGS 900 ( D )  
Parameter : E: inhalable fraction  
Limit value : 10 mg/m<sup>3</sup>  
Peak limitation : 2(II)  
Version : 23.06.2022

#### DNEL-/PNEC-values

##### DNEL/DMEL

ZINC DI(BENZOTHAZOL-2-YL) DISULPHIDE ; CAS No. : 155-04-4

Limit value type : DNEL worker (systemic)

Exposure route : Inhalation

Exposure frequency : Long-term

Limit value : 10,5 mg/m<sup>3</sup>

Limit value type : DNEL worker (systemic)

Exposure route : Inhalation

Exposure frequency : Short-term

Limit value : 21 mg/m<sup>3</sup>

Limit value type : DNEL worker (systemic)

Exposure route : Dermal

Exposure frequency : Long-term

Limit value : 6 mg/kg

Limit value type : DNEL worker (systemic)

Exposure route : Dermal

Exposure frequency : Short-term

Limit value : 12 mg/kg

##### PNEC

ZINC DI(BENZOTHAZOL-2-YL) DISULPHIDE ; CAS No. : 155-04-4

Limit value type : PNEC (Aquatic, freshwater)

Exposure route : Water (Including sewage plant)

Limit value : 0,0041 mg/l

Limit value type : PNEC Intermittierende Einleitung

Exposure route : Water (Including sewage plant)

Limit value : 0,005 mg/l

Limit value type : PNEC (Aquatic, marine water)

Exposure route : Water (Including sewage plant)

Limit value : 0,00041 mg/l

Limit value type : PNEC soil

Exposure route : Soil

Limit value : 0,027 mg/kg

Limit value type : PNEC Soil, Freshwater

Exposure route : Soil

Limit value : 0,147 mg/kg

Limit value type : PNEC Soil, Marine water

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Exposure route : Soil  
Limit value : 0,0147 mg/kg  
Limit value type : PNEC (Sewage treatment plant)  
Exposure route : Water (Including sewage plant)  
Limit value : 0,3 mg/l

## 8.2 Exposure controls

### Personal protection equipment

#### Eye/face protection

##### Suitable eye protection

Dust protection eye glasses

##### Remark

Note DGUV-Rule 112-192.

#### Skin protection

##### Hand protection

**Suitable gloves type** : Disposable gloves. Gloves with long cuffs

**Required properties** : dust-tight. antistatic.

**Remark** : After washing hands replace lost skin fat by fat containing skin creams. Note DGUV-Rule 112-195. Note TRGS 401.

##### Body protection

Personel should wear protective clothings and all parts of the body should be washed after contact. Care should be taken in the selection of protective clothing to ensure that inflammation and irritation of the skin at neck and wrists through contact with the powder is avoided. Using protective clothing.

**Recommended material** : Natural fibres (e.g. cotton), heat-resistant synthetic fibres.

**Remark** : Note DGUV-Rule 112-189. Note TRGS 401.

#### Respiratory protection

Respiratory protection necessary at: insufficient exhaust

##### Suitable respiratory protection apparatus

Use breathing filter P2 (particle).

European Committee for Standardization (CEN) standards EN 136, 140 and 405 provide respirator masks and EN 149 and 143 provide filter recommendations.

##### Remark

Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190). Note TRGS 402.

#### General information

Used working clothes should not be worn outside the work area.

#### Other protection measures

Technical measures and the application of suitable work processes have priority over personal protection equipment.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

**Physical state** : Powder (1-150 µm)

**Colour** : According to product identification.

#### Odour

Poor, characteristic.

#### Safety characteristics

**Melting point/freezing point** : > 50 °C

**Initial boiling point and boiling range** : ( 1013 hPa ) not applicable

**Decomposition temperature** : > 250 °C

**Flash point** : not applicable

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Auto-ignition temperature :	>	450	°C
Lower explosion limit :	ca	50 - 70	g/m <sup>3</sup>
Upper explosion limit :		No data available	
Vapour pressure :	( 50 °C )	not applicable	
Density :	( 20 °C )	1,2 - 1,7	g/cm <sup>3</sup>
Solvent separation test :	( 20 °C )	not applicable	
Water solubility :	( 20 °C )	practically insoluble	
pH :	( 20 °C / 10 g/l )	No data available	
Viscosity :	( 20 °C )	not applicable	
Kinematic viscosity :	( 23 °C )	not applicable	
Solid content :		100	Weight-%

## 9.2 Other information

The physical specifications are approximate values and refer to the used safety relevant component(s).

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No information available.

### 10.2 Chemical stability

Stable under recommended storage and handling conditions (see section 7).

### 10.3 Possibility of hazardous reactions

No information available.

### 10.4 Conditions to avoid

No information available.

### 10.5 Incompatible materials

No information available.

### 10.6 Hazardous decomposition products

Does not decompose when used for intended uses.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

##### Acute oral toxicity

Parameter :	ATEmix calculated
Exposure route :	Oral
Effective dose :	not relevant

##### Acute dermal toxicity

Parameter :	ATEmix calculated
Exposure route :	Dermal
Effective dose :	not relevant

##### Acute inhalation toxicity

Parameter :	ATEmix calculated
Exposure route :	Inhalation (dust/mist)
Effective dose :	not relevant

#### Corrosion

##### Skin corrosion/irritation

##### Practical experience/human evidence

Powder coatings can cause localised skin irritation in folds of the skin or in contact with tight clothing.

##### Respiratory or skin sensitisation

The product contains sensitizing substances, which may produce an allergic reaction (see section 2 and 3).

##### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

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Das Produkt enthält Titandioxid mit einem aerodynamischen Durchmesser von höchstens 10 µm in einer Konzentration von < 1 Gew.-%.

## SECTION 12: Ecological information

### 12.1 Toxicity

Harmful to aquatic life, may cause long-term adverse effects in the aquatic environment.

#### Aquatic toxicity

##### Acute (short-term) fish toxicity

Parameter : LC50 ( ZINC DI(BENZOTHIAZOL-2-YL) DISULPHIDE ; CAS No. : 155-04-4 )  
Effective dose : 0,73 mg/l  
Exposure time : 96 h

##### Chronic (long-term) fish toxicity

Parameter : NOEC ( ZINC DI(BENZOTHIAZOL-2-YL) DISULPHIDE ; CAS No. : 155-04-4 )  
Effective dose : 0,041 mg/l  
Exposure time : 89 D

##### Acute (short-term) toxicity to crustacea

Parameter : EC50 ( ZINC DI(BENZOTHIAZOL-2-YL) DISULPHIDE ; CAS No. : 155-04-4 )  
Effective dose : 0,71 mg/l  
Exposure time : 48 h

##### Chronic (long-term) toxicity to aquatic invertebrate

Parameter : NOEC ( ZINC DI(BENZOTHIAZOL-2-YL) DISULPHIDE ; CAS No. : 155-04-4 )  
Effective dose : 0,08 mg/l  
Exposure time : 21 D

##### Acute (short-term) toxicity to algae and cyanobacteria

Parameter : EC50 ( ZINC DI(BENZOTHIAZOL-2-YL) DISULPHIDE ; CAS No. : 155-04-4 )  
Evaluation parameter : Inhibition of growth rate  
Effective dose : 0,5 mg/l  
Exposure time : 72 h

##### Chronic (long-term) toxicity to aquatic algae and cyanobacteria

Parameter : NOEC ( ZINC DI(BENZOTHIAZOL-2-YL) DISULPHIDE ; CAS No. : 155-04-4 )  
Effective dose : 0,066 mg/l  
Exposure time : 72 h

##### Toxicity to microorganisms

Parameter : EC50 ( ZINC DI(BENZOTHIAZOL-2-YL) DISULPHIDE ; CAS No. : 155-04-4 )  
Effective dose : 1220 mg/l  
Exposure time : 3 h

### 12.2 Persistence and degradability

#### Abiotic degradation

Mechanical separation in a suitable sewage plant is possible.

#### Biodegradation

In accordance with the required stability the product is poorly biodegradable.

### 12.3 Bioaccumulative potential

No information available.

### 12.4 Mobility in soil

No information available.

### 12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

### 12.6 Other adverse effects

No information available.

### 12.7 Additional ecotoxicological information

#### Additional information

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Do not allow uncontrolled discharge of product into the environment.

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. Dispose of waste according to applicable legislation.

##### Directive 2008/98/EC (Waste Framework Directive)

###### Before intended use

###### Waste codes/waste designations according to EWC/AVV

08 02 01 (Waste coating powders)

###### Other disposal recommendations

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

#### 13.2 Additional information

Note sections 7 and 8.

### SECTION 14: Transport information

#### 14.1 UN number

No dangerous good in sense of these transport regulations.

#### 14.2 UN proper shipping name

No dangerous good in sense of these transport regulations.

#### 14.3 Transport hazard class(es)

No dangerous good in sense of these transport regulations.

#### 14.4 Packing group

No dangerous good in sense of these transport regulations.

#### 14.5 Environmental hazards

No dangerous good in sense of these transport regulations.

#### 14.6 Special precautions for user

None

### SECTION 15: Regulatory information

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

##### EU legislation

###### Authorisations and/or restrictions on use

###### Restrictions on use

Use restriction according to REACH annex XVII, no. : 3, 75

###### Restrictions of occupation

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).  
Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

##### National regulations

###### Technische Anleitung Luft (TA-Luft)

Weight fraction (Number 5.2.5. I) : < 0,5 %

###### Water hazard class

Classification according to AwSV - Class : 1 (Slightly hazardous to water)

###### Other regulations, restrictions and prohibition regulations

Note TRGS 001. Note TRGS 400.



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Burn Number according to VDI 2263 Annex I : 2

### 15.2 Chemical Safety Assessment

A chemical safety assessment has not been carried out.

## SECTION 16: Other information

### 16.1 Indication of changes

02. Classification of the substance or mixture · 02. Special rules for supplemental label elements for certain mixtures · 15. Restrictions on use · 15. Water hazard class

### 16.2 Abbreviations and acronyms

AwSV: Ordinance on plants for the handling of substances hazardous to water. BGR(I): Rule (Information) from the german employers liability insurance association. DGUV: German Statutory Accident Insurance. EWC: European Waste Catalogue. TRGS: German Technical Rule for Hazardous Substances. VCI: German chemical industry association.

### 16.3 Key literature references and sources for data

None

### 16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Calculation method.

### 16.5 Relevant H- and EUH-phrases (Number and full text)

H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

### 16.6 Training advice

None

### 16.7 Additional information

None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.