

Safety Data Sheet

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



Trade name : Universal-Polyesterpulver 5941
Revision date : 20.02.2025
Print date : 20.02.2025

Version (Revision) : 4.0.0 (3.0.0)

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

1.1 Product identifier

Universal-Polyesterpulver 5941

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]

None

Additional information

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP]. A safety data sheet is not required for this product under Article 31 of REACH. This safety data sheet has been created on a voluntary basis.

2.2 Label elements

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

Precautionary statements

P260 Do not breathe dust.

Special rules for supplemental label elements for certain mixtures

EUH210 Safety data sheet available on request.

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

3.2 Mixtures

Hazardous ingredients

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2-ethyl-N,N-bis(2-ethylhexyl)hexylamine ; REACH No. : 01-2119896439-16 ; EC No. : 217-461-0; CAS No. : 1860-26-0
Weight fraction : < 0,5 %
Classification 1272/2008 [CLP] : Repr. 2 ; H361 STOT RE 2 ; H373

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

No information available.

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 (CO₂), water spray. For fire fighting in manual or automatic powder coating systems in accordance with BGI 764, the extinguishing agent CO₂ 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 CO₂, 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_x), carbon monoxide (CO), carbon dioxide (CO₂) and pyrolysis products, toxic.

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

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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

GENERAL LIMIT VALUE FOR DUST

Limit value type (country of origin) : TRGS 900 (D)

Parameter : A: respirable fraction

Limit value : 1,25 mg/m³

Peak limitation : 2(II)

Version : 12.06.2023

Limit value type (country of origin) : TRGS 900 (D)

Parameter : E: inhalable fraction

Limit value : 10 mg/m³

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Peak limitation : 2(II)
Version : 12.06.2023

DNEL-/PNEC-values

DNEL/DMEL

2-ethyl-N,N-bis(2-ethylhexyl)hexylamine ; CAS No. : 1860-26-0

Limit value type : DNEL worker (systemic)

Exposure route : Inhalation

Limit value : 0,23 mg/m³

Limit value type : DNEL worker (systemic)

Exposure route : Inhalation

Limit value : 0,13 mg/kg

PNEC

2-ethyl-N,N-bis(2-ethylhexyl)hexylamine ; CAS No. : 1860-26-0

Limit value type : PNEC (Aquatic, freshwater)

Exposure route : Water (Including sewage plant)

Limit value : 0,2 mg/l

Limit value type : PNEC (Aquatic, intermittent release)

Limit value : 1 mg/l

Limit value type : PNEC (Aquatic, marine water)

Exposure route : Water (Including sewage plant)

Limit value : 0,02 mg/l

Limit value type : PNEC (Sediment, freshwater)

Limit value : 648 mg/kg

Limit value type : PNEC soil

Exposure route : Soil

Limit value : 0,78 mg/kg

Limit value type : PNEC Soil, Marine water

Limit value : 64,8 mg/kg

Limit value type : PNEC (Secondary poisoning)

Limit value : 1,56 mg/kg

Limit value type : PNEC (Sewage treatment plant)

Exposure route : Water (Including sewage plant)

Limit value : 97 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

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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	
Auto-ignition temperature :	>	450	°C
Lower explosion limit :	approx.	50 - 70	g/m ³
Upper explosion limit :		No data available	
Vapour pressure :	(50 °C)	not applicable	
Density :	(20 °C)	1,2 - 1,7	g/cm ³
Solvent separation test :	(20 °C)	not applicable	
Water solubility :	(20 °C)	practically insoluble	
pH :	(20 °C / 10 g/l)	No data available	
log P O/W :		not relevant	
Viscosity :	(20 °C)	not applicable	
Solid content :		100	Weight-%
Odour threshold :		not relevant	
Relative vapour density :	(20 °C)	not applicable	
Vapourisation rate :		not applicable	
Flammable solids :	Not highly flammable.		
Oxidising solids :	Not oxidising.		

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

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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
Exposure route : Oral
Effective dose : not relevant
Parameter : LD50 (2-ethyl-N,N-bis(2-ethylhexyl)hexylamine ; CAS No. : 1860-26-0)
Exposure route : Oral
Species : Rat
Effective dose : > 5000 mg/kg

Acute dermal toxicity

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

Acute inhalation toxicity

Parameter : ATEmix
Exposure route : Inhalation (dust/mist)
Effective dose : not relevant
Parameter : LC0 (2-ethyl-N,N-bis(2-ethylhexyl)hexylamine ; CAS No. : 1860-26-0)
Exposure route : Inhalation
Species : Rat
Effective dose : 0,23 mg/l
Exposure time : 8 h

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.

Repeated dose toxicity (subacute, subchronic, chronic)

Subacute oral toxicity

Parameter : LOAEL(C) (2-ethyl-N,N-bis(2-ethylhexyl)hexylamine ; CAS No. : 1860-26-0)
Exposure route : Oral
Species : Rat
Effective dose : 125 mg/kg
Exposure time : 1 D
Parameter : NOAEL(C) (2-ethyl-N,N-bis(2-ethylhexyl)hexylamine ; CAS No. : 1860-26-0)
Exposure route : Oral
Species : Rat
Effective dose : 19 mg/kg

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

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

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12.1 Toxicity

Aquatic toxicity

Acute (short-term) fish toxicity

Parameter : LC50 (2-ethyl-N,N-bis(2-ethylhexyl)hexylamine ; CAS No. : 1860-26-0)
Effective dose : > 464 mg/l
Exposure time : 96 h

Chronic (long-term) fish toxicity

Parameter : NOEC (2-ethyl-N,N-bis(2-ethylhexyl)hexylamine ; CAS No. : 1860-26-0)
Effective dose : 68,1 mg/l
Exposure time : 96 h

Acute (short-term) toxicity to crustacea

Parameter : EC50 (2-ethyl-N,N-bis(2-ethylhexyl)hexylamine ; CAS No. : 1860-26-0)
Effective dose : > 100 mg/l
Exposure time : 48 h

Chronic (long-term) toxicity to aquatic invertebrate

Parameter : NOEC (2-ethyl-N,N-bis(2-ethylhexyl)hexylamine ; CAS No. : 1860-26-0)
Effective dose : > 10 mg/l
Exposure time : 21 D

Acute (short-term) toxicity to algae and cyanobacteria

Parameter : EC50 (2-ethyl-N,N-bis(2-ethylhexyl)hexylamine ; CAS No. : 1860-26-0)
Effective dose : > 100 mg/l
Exposure time : 72 h

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

Parameter : NOEC (2-ethyl-N,N-bis(2-ethylhexyl)hexylamine ; CAS No. : 1860-26-0)
Effective dose : 100 mg/l
Exposure time : 72 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

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

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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 of occupation

Observe restrictions to employment for juveniles 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 zur Reinhaltung der 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.

15.2 Chemical Safety Assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

16.1 Indication of changes

02. Label elements · 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.

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16.3 Key literature references and sources for data

Regulation (EC) No. 1907/2006 (REACH), amended by the Regulation (EC) 2020/878
Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixture
ADN: (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
ADR: (Accord européen relatif transport des marchandises dangereuses par route)
Database of the registered Substances of the European Chemicals Agency (ECHA)
GESTIS - Database on hazardous substances - (IFA, Institute for Occupational Safety and Health of the German Social Accident Insurance)
Information of our suppliers
GISBAU (Hazardous materials information system of the German professional associations of the building and construction industry)

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)

H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.

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.