

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.: 0608 LUKAS BERLIN TITANIUM WHITE
Print date 02.10.2019 Revision date 19.01.2018 EN
Version 1.0 Issue date 24.04.2015 Page 1 / 7

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

1.1. product identifiers

Article No. (manufacturer/supplier): 0608
Identification of the substance or mixture LUKAS BERLIN TITANIUM WHITE
Water Mixable Artists' Oil Colours

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

Relevant identified uses

Paints for Arts, Hobby & Craft
Artists supply and hobby preparations
Coatings and paints, thinners, paint removers

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/downstream user/distributor):

Daler-Rowney Ltd
Peacock Lane Telephone: +44 (0) 1344 461083
Bracknell, RG12 8SS Telefax: +44 (0) 1344 486511
ENGLAND

Dept. responsible for information:

E-mail Philip.Gray@daler-rowney.com

1.4. Emergency telephone number

Emergency telephone: +44 (0) 1344 461000

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Aquatic Chronic 2 / H411 Hazardous to the aquatic environment Toxic to aquatic life with long lasting effects.

2.2. Label elements

The product is classified and labelled according to EC directives or corresponding national laws.

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

Hazard pictograms



Hazard statements

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.
P391 Collect spillage.
P501 Dispose of contents/container in accordance with local legislation.

contains:

not applicable

Supplemental Hazard information (EU)

not applicable

2.3. Other hazards

Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be placed in a closed metal container soaked with water. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Product description / chemical characterization

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.: 0608
Print date 02.10.2019
Version 1.0

LUKAS BERLIN TITANIUM WHITE
Revision date 19.01.2018
Issue date 24.04.2015

EN
Page 2 / 7

Description oil paint

Hazardous ingredients

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

EC No.	REACH No.	Wt %
CAS No.	Chemical name	Remark
INDEX No.	classification:	
215-222-5	01-2119463881-32	
1314-13-2	zinc oxide	5 - 10
030-013-00-7	Aquatic Acute 1 H400 / Aquatic Chronic 1 H410	

Additional information

Full text of classification: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

Following skin contact

Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap.

After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious).

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

In all cases of doubt, or when symptoms persist, seek medical advice.

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

Extinguishing media which must not be used for safety reasons:

strong water jet

5.2. Special exposure hazards arising from the substance or preparation itself, its combustion products or from resulting gases:

Dense black smoke occurs during fire. Hazardous decomposition byproducts may form with exposure to high temperatures. Hazardous decomposition products: Acrolein

5.3. Special protective equipment for firefighters

Provide a conveniently located respiratory protective device.

Additional information

Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.: 0608
Print date 02.10.2019
Version 1.0

LUKAS BERLIN TITANIUM WHITE
Revision date 19.01.2018
Issue date 24.04.2015

EN
Page 3 / 7

for disposal in appropriate containers in accordance with the local regulations (see section 13).

6.4. Reference to other sections

Observe protective provisions (see section 7 and 8).

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advices on safe handling

Avoid contact with skin, eyes and clothes. Avoid respiration of swarf. When using do not eat, drink or smoke. Personal protection equipment: refer to section 8.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Keep container tightly closed.

Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers.

Further information on storage conditions

Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 15 °C and 30 °C. Protect from heat and direct sunlight. Keep container tightly closed.

7.3. Specific end use(s)

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values:

zinc oxide

INDEX No. 030-013-00-7 / EC No. 215-222-5 / CAS No. 1314-13-2

TWA: 5 mg/m³

STEL: 10 mg/m³

Additional information

TWA : long-term occupational exposure limit value

STEL : short-term occupational exposure limit value

Ceiling : peak limitation

8.2. Exposure controls

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

Occupational exposure controls

Respiratory protection

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190). Use only respiratory protection equipment with CE-symbol including four digit test number.

Hand protection

For prolonged or repeated handling the following glove material must be used: NBR (Nitrile rubber)

Thickness of the glove material > 0,4 mm ; Breakthrough time (maximum wearing time) > 480 min.

Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles EN ISO 374

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye protection

Wear closely fitting protective glasses in case of splashes.

Protective clothing

Wear antistatic clothing of natural fibers (cotton) or heat resistant synthetic fibers.

Protective measures

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

Environmental exposure controls

Do not allow to enter into surface water or drains. See chapter 7. No additional measures necessary.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.: 0608
Print date 02.10.2019
Version 1.0

LUKAS BERLIN TITANIUM WHITE
Revision date 19.01.2018
Issue date 24.04.2015

EN
Page 4 / 7

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance: Liquid
Physical state Liquid
Colour white
Odour characteristic

Safety relevant basis data	Unit	Method	Remark
Flash point (°C)	> 300 °C	DIN 53213	
Vapour pressure at 20 °C::	not applicable		
Density at 20 °C::	1,95 g/cm ³		
Water solubility (g/L)	completely miscible		
pH at 20 °C::	-		
Viscosity at 20 °C:	30000 mPa*s		

9.2. Other information:

SECTION 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.3. Possibility of hazardous reactions

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4. Conditions to avoid

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7. Hazardous decomposition byproducts may form with exposure to high temperatures. Hazardous decomposition products: Acrolein. Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later.

10.5. Incompatible materials

10.6. Hazardous decomposition products

Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides, Acrolein

SECTION 11: Toxicological information

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

No data on preparation itself available.

11.1. Information on toxicological effects

Acute toxicity

zinc oxide

oral, LD50, Rat: > 15000 mg/kg

inhalative (dust and mist), LC50, Rat: > 5.7 mg/l (4 h)

skin corrosion/irritation; Serious eye damage/eye irritation

zinc oxide

Skin, OECD 404, Rabbit

Not an irritant.

eyes, OECD 405, Rabbit

Not an irritant.

Respiratory or skin sensitisation

zinc oxide

Skin, Guinea pig:

not sensitising.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

zinc oxide

Germ cell mutagenicity

No experimental indications of genotoxicity in-vitro exist.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.: 0608
Print date 02.10.2019
Version 1.0

LUKAS BERLIN TITANIUM WHITE
Revision date 19.01.2018
Issue date 24.04.2015

EN
Page 5 / 7

Carcinogenicity
No indication of human carcinogenicity.

Specific target organ toxicity

Toxicological data are not available.

Aspiration hazard

Toxicological data are not available.

Practical experience/human evidence

Other observations:

Overall Assessment on CMR properties

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

Remark

There is no information available on the preparation itself .

SECTION 12: Ecological information

overall evaluation

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

There is no information available on the preparation itself .

Do not allow to enter into surface water or drains.

12.1. Toxicity

zinc oxide

Fish toxicity, LC50, fish 1.1 - 2250 mg/l (96 h)

Algae toxicity, ErC50, Selenastrum capricornutum: 0.17 mg/l (72 h)

Long-term Ecotoxicity

Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

Toxicological data are not available.

12.3. Bioaccumulative potential

Toxicological data are not available.

Bioconcentration factor (BCF)

Toxicological data are not available.

12.4. Mobility in soil

Toxicological data are not available.

12.5. Results of PBT assessment

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

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal / Product Recommendation

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

List of proposed waste codes/waste designations in accordance with EWC

080111* waste paint and varnish containing organic solvents or other dangerous substances

packaging

Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste. Send to a collecting point for used paints.

Additional information

Spontaneous ignition possible through autoxidation of cloths soaked in the product.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.: 0608
Print date 02.10.2019
Version 1.0

LUKAS BERLIN TITANIUM WHITE
Revision date 19.01.2018
Issue date 24.04.2015

EN
Page 6 / 7

SECTION 14: Transport information

- 14.1. **UN number**
UN 3082
- 14.2. **UN proper shipping name**
Land transport (ADR/RID): Environmentally hazardous substance, liquid, n.o.s.
(Zincoxide)
Sea transport (IMDG): ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Zincoxide)
Air transport (ICAO-TI / IATA-DGR): Environmentally hazardous substance, liquid, n.o.s.
(Zincoxide)
- 14.3. **Transport hazard class(es)**
9
- 14.4. **Packing group**
III
- 14.5. **Environmental hazards**
Land transport (ADR/RID) UMWELTGEFÄHRDEND
Marine pollutant p / Zincoxide
- 14.6. **Special precautions for user**
Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.
Advices on safe handling: see parts 6 - 8
- Further information**
- Land transport (ADR/RID)**
tunnel restriction code E
- Sea transport (IMDG)**
EmS-No. F-A, S-F
- 14.7. **Transport in bulk according to Annex II of Marpol and the IBC Code**
not applicable

SECTION 15: Regulatory information

- 15.1. **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- EU legislation**
- Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).**
- | | |
|---------------------------------|---|
| VOC-value (in g/L) ISO 11890-2: | 3 |
| VOC-value (in g/L) ASTM D 2369: | 3 |
- National regulations**
- Restrictions of occupation**
Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).
- Other regulations, restrictions and prohibition regulations**
- 15.2. **Chemical Safety Assessment**
For the following substances of this preparation a chemical safety assessment has been carried out:
- | EC No. | Chemical name | REACH No. |
|-----------|---------------|------------------|
| CAS No. | | |
| 215-222-5 | zinc oxide | 01-2119463881-32 |
| 1314-13-2 | | |

16. Other information

Full text of classification in section 3:

Aquatic Acute 1 / H400	Hazardous to the aquatic environment	Very toxic to aquatic organisms.
Aquatic Chronic 1 / H410	Hazardous to the aquatic environment	Very toxic to aquatic life with long lasting

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.:	0608	LUKAS BERLIN TITANIUM WHITE	
Print date	02.10.2019	Revision date 19.01.2018	EN
Version	1.0	Issue date 24.04.2015	Page 7 / 7

effects.

Abbreviations and acronyms

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Further information

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

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in chapter 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.: 0604 LUKAS BERLIN ZINC WHITE
Print date 02.10.2019 Revision date 19.01.2018 EN
Version 1.1 Issue date 24.04.2015 Page 1 / 7

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

1.1. product identifiers

Article No. (manufacturer/supplier): 0604
Identification of the substance or mixture LUKAS BERLIN ZINC WHITE
Water Mixable Artists' Oil Colour

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

Relevant identified uses

Paints for Arts, Hobby & Craft
Artists supply and hobby preparations
Coatings and paints, thinners, paint removers

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/downstream user/distributor):

Daler-Rowney Ltd
Peacock Lane Telephone: +44 (0) 1344 461083
Bracknell, RG12 8SS Telefax: +44 (0) 1344 486511
ENGLAND

Dept. responsible for information:

E-mail Philip.Gray@daler-rowney.com

1.4. Emergency telephone number

Emergency telephone: +44 (0) 1344 461000

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Aquatic Chronic 2 / H411 Hazardous to the aquatic environment Toxic to aquatic life with long lasting effects.

2.2. Label elements

The product is classified and labelled according to EC directives or corresponding national laws.

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

Hazard pictograms



Hazard statements

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.
P391 Collect spillage.
P501 Dispose of contents/container in accordance with local legislation.

contains:

not applicable

Supplemental Hazard information (EU)

not applicable

2.3. Other hazards

Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be placed in a closed metal container soaked with water. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Product description / chemical characterization

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.: 0604 LUKAS BERLIN ZINC WHITE
Print date 02.10.2019 Revision date 19.01.2018
Version 1.1 Issue date 24.04.2015

EN
Page 2 / 7

Description oil paint

Hazardous ingredients

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

EC No.	REACH No.	Wt %
CAS No.	Chemical name	Remark
INDEX No.	classification:	
215-222-5	01-2119463881-32	
1314-13-2	zinc oxide	20 - 25
030-013-00-7	Aquatic Acute 1 H400 / Aquatic Chronic 1 H410	

Additional information

Full text of classification: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

Following skin contact

Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap.

After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious).

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

In all cases of doubt, or when symptoms persist, seek medical advice.

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

Extinguishing media which must not be used for safety reasons:

strong water jet

5.2. Special exposure hazards arising from the substance or preparation itself, its combustion products or from resulting gases:

Dense black smoke occurs during fire. Hazardous decomposition byproducts may form with exposure to high temperatures. Hazardous decomposition products: Acrolein

5.3. Special protective equipment for firefighters

Provide a conveniently located respiratory protective device.

Additional information

Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.:	0604	LUKAS BERLIN ZINC WHITE	
Print date	02.10.2019	Revision date 19.01.2018	EN
Version	1.1	Issue date 24.04.2015	Page 3 / 7

for disposal in appropriate containers in accordance with the local regulations (see section 13).

6.4. Reference to other sections

Observe protective provisions (see section 7 and 8).

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advices on safe handling

Avoid contact with skin, eyes and clothes. Avoid respiration of swarf. When using do not eat, drink or smoke. Personal protection equipment: refer to section 8.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Keep container tightly closed.

Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers.

Further information on storage conditions

Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 15 °C and 30 °C. Protect from heat and direct sunlight. Keep container tightly closed.

7.3. Specific end use(s)

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values:

zinc oxide

INDEX No. 030-013-00-7 / EC No. 215-222-5 / CAS No. 1314-13-2

TWA: 5 mg/m³

STEL: 10 mg/m³

Additional information

TWA : long-term occupational exposure limit value

STEL : short-term occupational exposure limit value

Ceiling : peak limitation

8.2. Exposure controls

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

Occupational exposure controls

Respiratory protection

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190). Use only respiratory protection equipment with CE-symbol including four digit test number.

Hand protection

For prolonged or repeated handling the following glove material must be used: NBR (Nitrile rubber)

Thickness of the glove material > 0,4 mm ; Breakthrough time (maximum wearing time) > 480 min.

Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles EN ISO 374

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye protection

Wear closely fitting protective glasses in case of splashes.

Protective clothing

Wear antistatic clothing of natural fibers (cotton) or heat resistant synthetic fibers.

Protective measures

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

Environmental exposure controls

Do not allow to enter into surface water or drains. See chapter 7. No additional measures necessary.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.: 0604 LUKAS BERLIN ZINC WHITE
Print date 02.10.2019 Revision date 19.01.2018
Version 1.1 Issue date 24.04.2015

EN
Page 4 / 7

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance: Liquid
Physical state Liquid
Colour white
Odour characteristic

Safety relevant basis data	Unit	Method	Remark
Flash point (°C)	> 300 °C	DIN 53213	
Vapour pressure at 20 °C::	not applicable		
Density at 20 °C::	2,01 g/cm ³		
Water solubility (g/L)	completely miscible		
pH at 20 °C::	-		
Viscosity at 20 °C:	30000 mPa*s		

9.2. Other information:

SECTION 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.3. Possibility of hazardous reactions

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4. Conditions to avoid

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7. Hazardous decomposition byproducts may form with exposure to high temperatures. Hazardous decomposition products: Acrolein. Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later.

10.5. Incompatible materials

10.6. Hazardous decomposition products

Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides, Acrolein

SECTION 11: Toxicological information

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

No data on preparation itself available.

11.1. Information on toxicological effects

Acute toxicity

zinc oxide

oral, LD50, Rat: > 15000 mg/kg

inhalative (dust and mist), LC50, Rat: > 5.7 mg/l (4 h)

skin corrosion/irritation; Serious eye damage/eye irritation

zinc oxide

Skin, OECD 404, Rabbit

Not an irritant.

eyes, OECD 405, Rabbit

Not an irritant.

Respiratory or skin sensitisation

zinc oxide

Skin, Guinea pig:

not sensitising.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

zinc oxide

Germ cell mutagenicity

No experimental indications of genotoxicity in-vitro exist.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.: 0604 LUKAS BERLIN ZINC WHITE
Print date 02.10.2019 Revision date 19.01.2018
Version 1.1 Issue date 24.04.2015

EN
Page 5 / 7

Carcinogenicity
No indication of human carcinogenicity.

Specific target organ toxicity

Toxicological data are not available.

Aspiration hazard

Toxicological data are not available.

Practical experience/human evidence

Other observations:

Overall Assessment on CMR properties

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

Remark

There is no information available on the preparation itself .

SECTION 12: Ecological information

overall evaluation

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

There is no information available on the preparation itself .

Do not allow to enter into surface water or drains.

12.1. Toxicity

zinc oxide

Fish toxicity, LC50, fish 1.1 - 2250 mg/l (96 h)

Algae toxicity, ErC50, Selenastrum capricornutum: 0.17 mg/l (72 h)

Long-term Ecotoxicity

Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

Toxicological data are not available.

12.3. Bioaccumulative potential

Toxicological data are not available.

Bioconcentration factor (BCF)

Toxicological data are not available.

12.4. Mobility in soil

Toxicological data are not available.

12.5. Results of PBT assessment

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

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal / Product Recommendation

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

List of proposed waste codes/waste designations in accordance with EWC

080111* waste paint and varnish containing organic solvents or other dangerous substances

packaging

Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste. Send to a collecting point for used paints.

Additional information

Spontaneous ignition possible through autoxidation of cloths soaked in the product.

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.: 0604
Print date 02.10.2019
Version 1.1

LUKAS BERLIN ZINC WHITE
Revision date 19.01.2018
Issue date 24.04.2015

EN
Page 6 / 7

SECTION 14: Transport information

- 14.1. **UN number** UN 3082
- 14.2. **UN proper shipping name**
Land transport (ADR/RID): Environmentally hazardous substance, liquid, n.o.s.
(Zincoxide)
Sea transport (IMDG): ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Zincoxide)
Air transport (ICAO-TI / IATA-DGR): Environmentally hazardous substance, liquid, n.o.s.
(Zincoxide)
- 14.3. **Transport hazard class(es)** 9
- 14.4. **Packing group** III
- 14.5. **Environmental hazards**
Land transport (ADR/RID) UMWELTGEFÄHRDEND
Marine pollutant p / Zincoxide
- 14.6. **Special precautions for user**
Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.
Advices on safe handling: see parts 6 - 8
- Further information**
- Land transport (ADR/RID)**
tunnel restriction code E
- Sea transport (IMDG)**
EmS-No. F-A, S-F
- 14.7. **Transport in bulk according to Annex II of Marpol and the IBC Code**
not applicable

SECTION 15: Regulatory information

- 15.1. **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- EU legislation**
- Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).**
VOC-value (in g/L) ISO 11890-2: 3
VOC-value (in g/L) ASTM D 2369: 3
- National regulations**
- Restrictions of occupation**
Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).
- Other regulations, restrictions and prohibition regulations**
- 15.2. **Chemical Safety Assessment**
For the following substances of this preparation a chemical safety assessment has been carried out:
- | EC No. | Chemical name | REACH No. |
|-----------|---------------|------------------|
| 215-222-5 | zinc oxide | 01-2119463881-32 |
| 1314-13-2 | | |

16. Other information

Full text of classification in section 3:

Aquatic Acute 1 / H400	Hazardous to the aquatic environment	Very toxic to aquatic organisms.
Aquatic Chronic 1 / H410	Hazardous to the aquatic environment	Very toxic to aquatic life with long lasting

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.: 0604 LUKAS BERLIN ZINC WHITE
Print date 02.10.2019 Revision date 19.01.2018
Version 1.1 Issue date 24.04.2015

EN
Page 7 / 7

effects.

Abbreviations and acronyms

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Further information

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

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in chapter 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.: Berlin2015 LUKAS Berlin
Print date 02.10.2019 Revision date 19.01.2018 EN
Version 1.3 Issue date 11.02.2015 Page 1 / 6

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

1.1. product identifiers

Article No. (manufacturer/supplier): Berlin2015
Identification of the substance or mixture LUKAS Berlin
Water Mixable Artists' Oil Colours
Art. No: 0605, 0609-0692, apart from white colors

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

Relevant identified uses

Paints for Arts, Hobby & Craft
Artists supply and hobby preparations
Coatings and paints, thinners, paint removers

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/downstream user/distributor):

Daler-Rowney Ltd
Peacock Lane Telephone: +44 (0) 1344 461083
Bracknell, RG12 8SS Telefax: +44 (0) 1344 486511
ENGLAND

Dept. responsible for information:

E-mail Philip.Gray@daler-rowney.com

1.4. Emergency telephone number

Emergency telephone: +44 (0) 1344 461000

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

2.2. Label elements

The product is classified and labelled according to EC directives or corresponding national laws.

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

Hazard pictograms

Hazard statements

not applicable

Precautionary statements

not applicable

contains:

not applicable

Supplemental Hazard information (EU)

not applicable

2.3. Other hazards

Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be placed in a closed metal container soaked with water. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Product description / chemical characterization

Description oil paint

Hazardous ingredients

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

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.: Berlin2015 LUKAS Berlin
Print date 02.10.2019 Revision date 19.01.2018
Version 1.3 Issue date 11.02.2015

EN
Page 2 / 6

EC No. CAS No. INDEX No.	REACH No. Chemical name classification:	Wt % Remark
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not applicable

Additional information

Full text of classification: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

Following skin contact

Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap.

After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious).

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

In all cases of doubt, or when symptoms persist, seek medical advice.

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

Extinguishing media which must not be used for safety reasons:

strong water jet

5.2. Special exposure hazards arising from the substance or preparation itself, its combustion products or from resulting gases:

Dense black smoke occurs during fire. Hazardous decomposition byproducts may form with exposure to high temperatures. Hazardous decomposition products: Acrolein

5.3. Special protective equipment for firefighters

Provide a conveniently located respiratory protective device.

Additional information

Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13).

6.4. Reference to other sections

Observe protective provisions (see section 7 and 8).

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.: Berlin2015 LUKAS Berlin
Print date 02.10.2019 Revision date 19.01.2018 EN
Version 1.3 Issue date 11.02.2015 Page 3 / 6

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advices on safe handling

Avoid contact with skin, eyes and clothes. Avoid respiration of swarf. When using do not eat, drink or smoke. Personal protection equipment: refer to section 8.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Keep container tightly closed.

Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers.

Further information on storage conditions

Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 15 °C and 30 °C. Protect from heat and direct sunlight. Keep container tightly closed.

7.3. Specific end use(s)

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values:

INDEX No. not applicable / CAS No.

8.2. Exposure controls

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

Occupational exposure controls

Respiratory protection

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190). Use only respiratory protection equipment with CE-symbol including four digit test number.

Hand protection

For prolonged or repeated handling the following glove material must be used: NBR (Nitrile rubber)

Thickness of the glove material > 0,4 mm ; Breakthrough time (maximum wearing time) > 480 min.

Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles EN ISO 374

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye protection

Wear closely fitting protective glasses in case of splashes.

Protective clothing

Wear antistatic clothing of natural fibers (cotton) or heat resistant synthetic fibers.

Protective measures

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

Environmental exposure controls

Do not allow to enter into surface water or drains. See chapter 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance: viscous
Physical state Liquid
Colour refer to label
Odour characteristic

Safety relevant basis data	Unit	Method	Remark
Flash point (°C)	300 °C	DIN 53213	

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.:	Berlin2015	LUKAS Berlin	
Print date	02.10.2019	Revision date	19.01.2018
Version	1.3	Issue date	11.02.2015
			EN
			Page 4 / 6

Vapour pressure at 20 °C::	0,17
Density at 20 °C::	1,96 g/cm ³
Water solubility (g/L)	completely miscible
pH at 20 °C::	-
Viscosity at 20 °C:	30000 mPa*s

9.2. Other information:

SECTION 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.3. Possibility of hazardous reactions

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4. Conditions to avoid

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7. Hazardous decomposition byproducts may form with exposure to high temperatures. Hazardous decomposition products: Acrolein. Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later.

10.5. Incompatible materials

10.6. Hazardous decomposition products

Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides, Acrolein

SECTION 11: Toxicological information

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

No data on preparation itself available.

11.1. Information on toxicological effects

Acute toxicity

Toxicological data are not available.

skin corrosion/irritation; Serious eye damage/eye irritation

Toxicological data are not available.

Respiratory or skin sensitisation

Toxicological data are not available.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Toxicological data are not available.

Specific target organ toxicity

Toxicological data are not available.

Aspiration hazard

Toxicological data are not available.

Practical experience/human evidence

Other observations:

Overall Assessment on CMR properties

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

Remark

There is no information available on the preparation itself .

SECTION 12: Ecological information

overall evaluation

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

There is no information available on the preparation itself .

Do not allow to enter into surface water or drains.

12.1. Toxicity

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.: Berlin2015 LUKAS Berlin EN
Print date 02.10.2019 Revision date 19.01.2018 Page 5 / 6
Version 1.3 Issue date 11.02.2015

No information available.

Long-term Ecotoxicity

Toxicological data are not available.

12.2. Persistence and degradability

Toxicological data are not available.

12.3. Bioaccumulative potential

Toxicological data are not available.

Bioconcentration factor (BCF)

Toxicological data are not available.

12.4. Mobility in soil

Toxicological data are not available.

12.5. Results of PBT assessment

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

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal / Product Recommendation

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

List of proposed waste codes/waste designations in accordance with EWC

080112 waste paint and varnish other than those mentioned in 080111

packaging

Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste. Send to a collecting point for used paints.

Additional information

Spontaneous ignition possible through autoxidation of cloths soaked in the product.

SECTION 14: Transport information

No dangerous good in sense of this transport regulation.

14.1. UN number

not applicable

14.2. UN proper shipping name

14.3. Transport hazard class(es)

not applicable

14.4. Packing group

not applicable

14.5. Environmental hazards

Land transport (ADR/RID) not applicable

Marine pollutant not applicable

14.6. Special precautions for user

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.

Advices on safe handling: see parts 6 - 8

Further information

Land transport (ADR/RID)

tunnel restriction code -

Sea transport (IMDG)

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.:	Berlin2015	LUKAS Berlin	
Print date	02.10.2019	Revision date	19.01.2018
Version	1.3	Issue date	11.02.2015
			EN
			Page 6 / 6

EmS-No. not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU legislation

Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).

VOC-value (in g/L) ISO 11890-2: 5

VOC-value (in g/L) ASTM D 2369: 5

National regulations

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Other regulations, restrictions and prohibition regulations

15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this preparation were not carried out.

16. Other information

Full text of classification in section 3:

Abbreviations and acronyms

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Further information

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

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in chapter 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.