

Coating Systems

Article No.: Print date: Version:

P106 01.09.2016 Zowo-tec® 106

Revision date: 31.08.2016 EN Issue date: 31.08.2016 Page 1 / 7

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

1.1. product identifiers

Article No. (manufacturer/supplier): P106

Identification of the substance or mixture Zowo-tec® 106

Protective Wood Impregnation

colorless

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

Relevant identified uses

Wood preservative, Coating material for wood

1.3. Details of the supplier of the safety data sheet

supplier (manufacturer/importer/downstream user/distributor)

Zobel Chemie GmbH

Weinsheimer Str. 59 Telephone: +49-6241-3002-0 D-67547 Worms Telefax: +49-6241-37690

Dept. responsible for information:

Laboratory

E-mail (competent person)

labor@zobel-coatings.de

1.4. Emergency telephone number

Giftinformationszentrum-Nord - 24h Hotline (deutsch und englisch): +49-(0)551-19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

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

Aquatic Chronic 3 / H412 Hazardous to the aquatic environment Harmful 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

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.

contains:

not applicable

Supplemental Hazard information (EU)

EUH208 Contains 3-Jod-2-Propinylbutylcarbamat. May produce an allergic reaction.

2.3. Other hazards

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Product description / chemical characterization

Description Aqueous alkyd acrylate system with mold protection

Hazardous ingredients

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

EC No. REACH No.
CAS No. Chemical name
INDEX No. classification: // Remark

Wt %



Coating Systems

Article No.: Print date:

P106 01.09.2016 Zowo-tec® 106

Revision date: 31.08.2016 Issue date: 31.08.2016

ersion:	2.0	Issue date: 31.08.2016	Page 2 / 7	
259-627-	·5			
55406-53	A H	Jod-2-Propinylbutylcarbamat cute Tox. 4 H302 / Acute Tox. 3 H331 / I 317 / STOT RE 1 H372 / Aquatic Acute 1 1 = 10)	Eye Dam. 1 H318 / Skin Sens. 1	5 - 1
271-253-	-6			
68526-86		otridecyl alcohole kin Irrit. 2 H315 / Aquatic Acute 1 H400	<(0,5
258-067-	.9			
52645-53	3-1 pe	ermethrin (ISO)	< (0,5
613-058-	H	cute Tox. 4 H302 / Acute Tox. 4 H332 / 304 / Aquatic Acute 1 H400 / Aquatic 226	·	

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. Do not use solvents or thinners.

After eye contact

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

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed

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

Indication of any immediate medical attention and special treatment needed

SECTION 5: Firefighting measures

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

Special hazards arising from the substance or mixture

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

Advice 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. Treat runoff as hazardous.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ventilate affected area. Do not breathe vapours. See protective measures under point 7 and 8.

6.2. **Environmental precautions**



Article No.: Print date: Version: P106

Zowo-tec® 106

01.09.2016 Revisi

Revision date: 31.08.2016 Issue date: 31.08.2016 **Coating Systems**

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.

Page 3 / 7

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). Clean using cleansing agents. Do not use solvents.

6.4. Reference to other sections

Observe protective provisions (see chapter 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. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

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. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Soils have to conform to the "Guidelines for avoidance of ignition hazards due to electrostatic charges (TRBS 2153)".

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. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

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

not applicable

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 DIN EN 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



Coating Systems

Article No.: P106 Zowo-tec® 106

 Print date:
 01.09.2016
 Revision date: 31.08.2016
 EN

 Version:
 2.0
 Issue date: 31.08.2016
 Page 4 / 7

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:

Flash point:

Evaporation rate:

Physical state: liquid
Colour: refer to label
Odour: characteristic
Odour threshold: not applicable
pH at 20 °C: not applicable
Melting point/freezing point: not applicable

Initial boiling point and boiling range: 100 °C

Source: butan-2-ol not applicable not applicable

Flammability (solid, gas):

burning time (s): not applicable

Upper/lower flammability or explosive limits:

Lower explosion limit: not applicable Upper explosion limit: not applicable Vapour pressure at 20 °C: 0,0021 mbar Vapour density: not applicable

Relative density:

Density at 20 °C: 1,01 g/cm³

Solubility(ies):

Water solubility (g/L) at 20 °C: completely miscible
Partition coefficient: n-octanol/water: See section 12.
Auto-ignition temperature: not applicable
Decomposition temperature: not applicable
Viscosity at 20 °C: 11 s 4 mm

Method: DIN 53211

Explosive properties: not applicable
Oxidising properties: not applicable

9.2. Other information

solvent content:

Organic solvents: 3 Wt % Water: 89 Wt %

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 chapter 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 chapter 7. Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5. Incompatible materials

10.6. Hazardous decomposition products



Article No.: P106 Zowo-tec® 106 Coating Systems

 Print date:
 01.09.2016
 Revision date: 31.08.2016
 EN

 Version:
 2.0
 Issue date: 31.08.2016
 Page 5 / 7

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

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:

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

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

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 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

SECTION 13: Disposal considerations

13.1. Waste treatment methods



Article No.: P106 Zowo-tec® 106

 Print date:
 01.09.2016
 Revision date: 31.08.2016
 EN

 Version:
 2.0
 Issue date: 31.08.2016
 Page 6 / 7

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.

SECTION 14: Transport information

This mixture is not classified as dangerous according to international transport regulations (ADR/RID, IMDG, ICAO/IATA).

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

Additional information

Land transport (ADR/RID)

tunnel restriction code

Sea transport (IMDG)

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

Biocide directive (98/8/EC)

biocide, active substance

permethrin (ISO) 0,005 g/kg 3-Jod-2-Propinylbutylcarbamat 8 g/kg N,N-Didecyl-N-methyl-poly(oxyethyl)ammoniumpropionat 0,05 g/kg

Use

PA08 Produktart 8 = Holzschutzmittel

Directive 2010/75/EU on industrial emissions

VOC-value (in g/L): 28,8

To follow:

Use biocides safely. Always read the label and product information before use.

National regulations



Article No.: P106 Zowo-tec® 106

 Print date:
 01.09.2016
 Revision date: 31.08.2016
 EN

 Version:
 2.0
 Issue date: 31.08.2016
 Page 7 / 7

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).

15.2. Chemical Safety Assessment

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

SECTION 16: Other information

Full text of classification in section 3:

Acute Tox. 4 / H302 Acute toxicity (oral) Harmful if swallowed.

Acute Tox. 3 / H331 Acute toxicity (inhalative) Toxic if inhaled.

Eye Dam. 1 / H318 Serious eye damage/eye irritation Causes serious eye damage.

Skin Sens. 1 / H317 Respiratory or skin sensitisation May cause an allergic skin reaction.

STOT RE 1 / H372 Specific target organ toxicity (repeated exposure) Causes damage to organs (or state all organs affected, if known) through prolonged or

repeated exposure (state route of exposure if it is conclusively proven that no other routes of

exposure cause the hazard).

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

effects.

Skin Irrit. 2 / H315 skin corrosion/irritation Causes skin irritation.

Acute Tox. 4 / H332 Acute toxicity (inhalative) Harmful if inhaled.
Asp. Tox. 1 / H304 Aspiration hazard May be fatal if swallowed and enters airways.

Flam. Liq. 3 / H226 Flammable liquids Flammable liquid and vapour.

Additional 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.

Annex

At present, sufficient data / information on exposure scenarios are not available, so that an evaluation of the preperation cannot yet be made.



Coating Systems

Article No.: Print date: Version: P203GL 01.09.2016 Zowo-tec® 203

Revision date: 29.08.2016 EN lssue date: 09.08.2016 Page 1 / 7

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

1.1. product identifiers

Article No. (manufacturer/supplier): P203GL
Identification of the substance or mixture Zowo-tec® 203
Protective glaze

Basis GL

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

Relevant identified uses

Wood preservative, Coating material for wood

1.3. Details of the supplier of the safety data sheet

supplier (manufacturer/importer/downstream user/distributor)

Zobel Chemie GmbH

Weinsheimer Str. 59 Telephone: +49-6241-3002-0 D-67547 Worms Telefax: +49-6241-37690

Dept. responsible for information:

Laboratory

E-mail (competent person)

labor@zobel-coatings.de

1.4. Emergency telephone number

Giftinformationszentrum-Nord - 24h Hotline (deutsch und englisch): +49-(0)551-19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

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

Aquatic Chronic 3 / H412 Hazardous to the aquatic environment Harmful 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

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.

contains:

not applicable

Supplemental Hazard information (EU)

EUH208 Contains 1,2-benzisothiazol-3(2H)-one; propiconazole (ISO); 2-Methyl-2H-isothiazol-3-on. May produce

an allergic reaction.

2.3. Other hazards

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Product description / chemical characterization

Description Aqueous alkyd acrylate system with mold protection

Hazardous ingredients

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

EC No. REACH No.
CAS No. Chemical name
INDEX No. classification: // Remark

Wt %



Coating Systems

Article No.: Print date: Version: P203GL 01.09.2016 Zowo-tec® 203

Revision date: 29.08.2016 Issue date: 09.08.2016

EN Page 2 / 7

	<u> </u>	
262-104-4 60207-90-1 613-205-00-0	propiconazole (ISO) Acute Tox. 4 H302 / Skin Sens. 1 H317 / Aquatic Acute 1 H400 / Aquatic Chronic 1 H410	0,5 - 1
271-253-6 68526-86-3	Isotridecyl alcohole Skin Irrit. 2 H315 / Aquatic Acute 1 H400	< 0,5
220-120-9 2634-33-5 613-088-00-6	1,2-benzisothiazol-3(2H)-one Acute Tox. 4 H302 / Skin Irrit. 2 H315 / Eye Dam. 1 H318 / Skin Sens. 1 H317 / Aquatic Acute 1 H400	< 0,5
220-239-6 2682-20-4	2-Methyl-2H-isothiazol-3-on Acute Tox. 4 H302 / Acute Tox. 2 H330 / Skin Corr. 1B H314 / Skin Sens. 1A H317 / STOT SE 3 H335 / Aquatic Acute 1 H400 / Aquatic Chronic 2 H411	< 0,5
258-067-9 52645-53-1 613-058-00-2	permethrin (ISO) Acute Tox. 4 H302 / Acute Tox. 4 H332 / Skin Sens. 1 H317 / Asp. Tox. 1 H304 / Aquatic Acute 1 H400 / Aquatic Chronic 1 H410 / Flam. Liq. 3 H226	< 0,5

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. Do not use solvents or thinners.

After eye contact

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

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

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 hazards arising from the substance or mixture

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

5.3. Advice for firefighters

Provide a conveniently located respiratory protective device.

Additional information



Article No.: Print date: Version: P203GL 01.09.2016 Zowo-tec® 203

Revision date: 29.08.2016 Issue date: 09.08.2016

EN Page 3 / 7

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. Treat runoff as hazardous.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ventilate affected area. Do not breathe vapours. 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). Clean using cleansing agents. Do not use solvents.

6.4. Reference to other sections

Observe protective provisions (see chapter 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. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

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. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Soils have to conform to the "Guidelines for avoidance of ignition hazards due to electrostatic charges (TRBS 2153)".

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. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

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

not applicable

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 DIN EN 374



Coating Systems

Article No.: P203GL Zowo-tec® 203

 Print date:
 01.09.2016
 Revision date: 29.08.2016
 EN

 Version:
 3.1
 Issue date: 09.08.2016
 Page 4 / 7

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:

Physical state: liquid
Colour: refer to label
Odour: characteristic
Odour threshold: not applicable
pH at 20 °C: not applicable
Melting point/freezing point: not applicable
Initial boiling point and boiling range: 100 °C

Source: Wasser

Flash point: not applicable Evaporation rate: not applicable

Flammability (solid, gas):

burning time (s): not applicable

Upper/lower flammability or explosive limits:

Lower explosion limit:
Upper explosion limit:

Vapour pressure at 20 °C:

Vapour density:

not applicable
0,0015 mbar
not applicable

Relative density:

Density at 20 °C: 1,01 g/cm³

Solubility(ies):

Water solubility (g/L) at 20 °C: completely miscible
Partition coefficient: n-octanol/water: See section 12.
Auto-ignition temperature: not applicable
Decomposition temperature: not applicable
Viscosity at 20 °C: 11 s 4 mm

Method: DIN 53211 not applicable

Explosive properties: not applicable
Oxidising properties: not applicable

9.2. Other information

solvent content:

Organic solvents: 2 Wt % Water: 81 Wt %

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 chapter 7.

10.3. Possibility of hazardous reactions



Article No.: Print date: Version: P203GL 01.09.2016 Zowo-tec® 203

Revision date: 29.08.2016 EN lssue date: 09.08.2016 Page 5 / 7

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 chapter 7. Hazardous decomposition byproducts may form with exposure to high temperatures.

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.

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

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

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

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 and vPvB assessment



Coating Systems

Article No.: Print date: Version:

P203GL 01.09.2016 Zowo-tec® 203

Revision date: 29.08.2016 EN Issue date: 09.08.2016 Page 6 / 7

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.

SECTION 14: Transport information

This mixture is not classified as dangerous according to international transport regulations (ADR/RID, IMDG, ICAO/IATA).

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

Additional information

Land transport (ADR/RID)

tunnel restriction code

Sea transport (IMDG)

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

Biocide directive (98/8/EC)

biocide, active substance

permethrin (ISO) 0,005g/kg propiconazole (ISO) 9,999 g/kg N,N-Didecyl-N-methyl-poly(oxyethyl)ammoniumpropionat 0,05 g/kg

Use

PA08 Produktart 8 = Holzschutzmittel



Article No.: P203GL Zowo-tec® 203

 Print date:
 01.09.2016
 Revision date: 29.08.2016
 EN

 Version:
 3.1
 Issue date: 09.08.2016
 Page 7 / 7

Directive 2010/75/EU on industrial emissions

VOC-value (in g/L): 25,0

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds

VOC product category: (Cat. A/h); VOC limit value: 30 g/l

Maximum VOC content (g/L) of the product in a ready to use condition: 25,0

To follow:

Use biocides safely. Always read the label and product information before use.

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).

15.2. Chemical Safety Assessment

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

SECTION 16: Other information

Full text of classification in section 3:

Acute Tox. 4 / H302 Acute toxicity (oral) Harmful if swallowed.

Skin Sens. 1 / H317 Respiratory or skin sensitisation May cause an allergic skin reaction.

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

effects.

Skin Irrit. 2 / H315 skin corrosion/irritation Causes skin irritation.

Eye Dam. 1 / H318 Serious eye damage/eye irritation Causes serious eye damage.

Acute Tox. 2 / H318 Serious eye damage/eye irritation Causes serious eye damage Serious eye damage Fatal if inhaled.

Skin Corr. 1B / H314 Serious eye damage/eye irritation Fatal if inhaled.

Causes serious eye damage/eye irritation Causes eye damage/eye irritation eye irritation

Skin Corr. 1B / H314 skin corrosion/irritation Causes severe skin burns and eye damage.
Skin Sens. 1A / H317 Respiratory or skin sensitisation May cause an allergic skin reaction.

STOT SE 3 / H335 Specific target organ toxicity (single May cause respiratory irritation. exposure)

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

Acute Tox. 4 / H332 Acute toxicity (inhalative) Harmful if inhaled.

Asp. Tox. 1 / H304 Aspiration hazard May be fatal if swallowed and enters airways. Flam. Liq. 3 / H226 Flammable liquids Flammable liquid and vapour.

Additional 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.

Annex

At present, sufficient data / information on exposure scenarios are not available, so that an evaluation of the preparation cannot yet be made.



Coating Systems

Article No.: P263 Zowo-tec® 263

 Print date:
 02.09.2016
 Revision date: 31.08.2016
 EN

 Version:
 3.0
 Issue date: 31.08.2016
 Page 1 / 7

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

1.1. product identifiers

Article No. (manufacturer/supplier): P263

Identification of the substance or mixture Zowo-tec® 263

Protective Insulating Primer

white, opaque

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

Relevant identified uses

Wood preservative, Coating material for wood

1.3. Details of the supplier of the safety data sheet

supplier (manufacturer/importer/downstream user/distributor)

Zobel Chemie GmbH

Weinsheimer Str. 59 Telephone: +49-6241-3002-0 D-67547 Worms Telefax: +49-6241-37690

Dept. responsible for information:

Laboratory

E-mail (competent person) labor@zobel-coatings.de

1.4. Emergency telephone number

Giftinformationszentrum-Nord - 24h Hotline (deutsch und englisch): +49-(0)551-19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

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

Skin Sens. 1 / H317 Respiratory or skin sensitisation May cause an allergic skin reaction.

Aquatic Chronic 3 / H412 Hazardous to the aquatic environment Harmful 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



Warning

Hazard statements

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P261 Avoid breathing vapours. P261 Avoid breathing spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves and eye/face protection.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention. P362 + P364 Take off contaminated clothing and wash it before reuse.

contains:

propiconazole (ISO)

1,2-benzisothiazol-3(2H)-one

Supplemental Hazard information (EU)

not applicable

2.3. Other hazards

SECTION 3: Composition / information on ingredients



Coating Systems

Article No.: Print date: Version: P263 02.09.2016 Zowo-tec® 263

Revision date: 31.08.2016 Issue date: 31.08.2016

EN Page 2 / 7

3.2. Mixtures

Product description / chemical characterization

Description Aqueous acrylate system with mold protection

Hazardous ingredients

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

EC No. CAS No. INDEX No.	REACH No. Chemical name classification: // Remark	Wt %
262-104-4 60207-90-1 613-205-00-0	propiconazole (ISO) Acute Tox. 4 H302 / Skin Sens. 1 H317 / Aquatic Acute 1 H400 / Aquatic Chronic 1 H410	1 - 2,5
215-222-5 1314-13-2 030-013-00-7	01-2119463881-32 zinc oxide Aquatic Chronic 1 H410	0,5 - 1
220-120-9 2634-33-5 613-088-00-6	1,2-benzisothiazol-3(2H)-one Acute Tox. 4 H302 / Skin Irrit. 2 H315 / Eye Dam. 1 H318 / Skin Sens. 1 H317 / Aquatic Acute 1 H400	< 0,5

Additional information

Full text of classification: see section 16

SECTION 4: First aid measures

.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. Do not use solvents or thinners.

After eye contact

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

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

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 hazards arising from the substance or mixture

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

5.3. Advice for firefighters

Provide a conveniently located respiratory protective device.

Additional information



Article No.: Print date: Version: P263

Zowo-tec® 263

02.09.2016 Revision date: 31.08.2016 3.0 Issue date: 31.08.2016

Page 3 / 7

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. Treat runoff as hazardous.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ventilate affected area. Do not breathe vapours. 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). Clean using cleansing agents. Do not use solvents.

6.4. Reference to other sections

Observe protective provisions (see chapter 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. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

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. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Soils have to conform to the "Guidelines for avoidance of ignition hazards due to electrostatic charges (TRBS 2153)".

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. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

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

not applicable

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 DIN EN 374



Coating Systems

Article No.: P263 Zowo-tec® 263

Print date: 02.09.2016 Revision date: 31.08.2016 EN Version: 3.0 Revision date: 31.08.2016 Page 4 / 7

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:

Physical state: liquid
Colour: refer to label
Odour: characteristic
Odour threshold: not applicable
pH at 20 °C: not applicable
Melting point/freezing point: not applicable
Initial boiling point and boiling range: 100 °C

Source: Wasser

Flash point: not applicable Evaporation rate: not applicable

Flammability (solid, gas):

burning time (s): not applicable

Upper/lower flammability or explosive limits:

Lower explosion limit:
Upper explosion limit:

Vapour pressure at 20 °C:

Vapour density:

not applicable
not applicable
not applicable

Relative density:

Density at 20 °C: 1,16 g/cm³

Solubility(ies):

Water solubility (g/L) at 20 °C: completely miscible
Partition coefficient: n-octanol/water: See section 12.
Auto-ignition temperature: not applicable
Decomposition temperature: not applicable
Viscosity at 20 °C: 11 s 4 mm

Method: DIN 53211 not applicable

Explosive properties: not applicable
Oxidising properties: not applicable

9.2. Other information

solvent content:

Organic solvents: 1 Wt % Water: 60 Wt %

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 chapter 7.

10.3. Possibility of hazardous reactions



Article No.: Print date: Version: P263 02.09.2016 Zowo-tec® 263

Revision date: 31.08.2016 Issue date: 31.08.2016 EN Page 5 / 7

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 chapter 7. Hazardous decomposition byproducts may form with exposure to high temperatures.

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.

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

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

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

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 and vPvB assessment

Safety Data Sheet

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



Coating Systems

Article No.: Print date:

P263

Zowo-tec® 263

Revision date: 31.08.2016 02.09.2016 Issue date: 31.08.2016 Version:

ΕN Page 6 / 7

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.

SECTION 14: Transport information

This mixture is not classified as dangerous according to international transport regulations (ADR/RID, IMDG, ICAO/IATA).

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 not applicable Marine pollutant

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

Additional information

Land transport (ADR/RID)

tunnel restriction code

Sea transport (IMDG)

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

Biocide directive (98/8/EC)

biocide, active substance

permethrin (ISO) 0.005 q/kg propiconazole (ISO) 11,924 g/kg N,N-Didecyl-N-methyl-poly(oxyethyl)ammoniumpropionat 0,05 g/kg

PA08 Produktart 8 = Holzschutzmittel



Coating Systems

Article No.: Print date: Version: P263 02.09.2016 Zowo-tec® 263

Revision date: 31.08.2016 Issue date: 31.08.2016

EN Page 7 / 7

Directive 2010/75/EU on industrial emissions

VOC-value (in g/L): 17,6

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds

VOC product category: (Cat. A/h); VOC limit value: 30 g/l

Maximum VOC content (g/L) of the product in a ready to use condition: 17,6

To follow:

Use biocides safely. Always read the label and product information before use.

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).

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		

SECTION 16: Other information

Full text of classification in section 3:

Acute Tox. 4 / H302 Acute toxicity (oral) Harmful if swallowed.

Skin Sens. 1 / H317 Respiratory or skin sensitisation May cause an allergic skin reaction. 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

Skin Irrit. 2 / H315 skin corrosion/irritation causes

Skin Irrit. 2 / H315 skin corrosion/irritation Causes skin irritation.

Eye Dam. 1 / H318 Serious eye damage/eye irritation Causes serious eye damage.

Additional 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.

Annex

At present, sufficient data / information on exposure scenarios are not available, so that an evaluation of the preperation cannot yet be made.



Coating Systems

Article No.: Print date: Version: P384

Zowo-tec® 384

02.09.2016 Revision date: 31.08.2016 2.0 Issue date: 31.08.2016

Page 1 / 7

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

1.1. product identifiers

Article No. (manufacturer/supplier): P384

Identification of the substance or mixture Zowo-tec® 384

Intermediate coating insulat.

white opaque

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

Relevant identified uses

Coating material for wood

1.3. Details of the supplier of the safety data sheet

supplier (manufacturer/importer/downstream user/distributor)

Zobel Chemie GmbH

Weinsheimer Str. 59 Telephone: +49-6241-3002-0 D-67547 Worms Telefax: +49-6241-37690

Dept. responsible for information:

Laboratory

E-mail (competent person)

labor@zobel-coatings.de

1.4. Emergency telephone number

Giftinformationszentrum-Nord - 24h Hotline (deutsch und englisch): +49-(0)551-19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

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

Aquatic Chronic 3 / H412 Hazardous to the aquatic environment Harmful 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

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.

contains:

not applicable

Supplemental Hazard information (EU)

not applicable

2.3. Other hazards

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Product description / chemical characterization

Description Aqueous acrylate system

Hazardous ingredients

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

EC No. REACH No.
CAS No. Chemical name
INDEX No. classification: // Remark

Wt %



Coating Systems

Article No.: P384 Zowo-tec® 384

 Print date:
 02.09.2016
 Revision date: 31.08.2016
 EN

 Version:
 2.0
 Issue date: 31.08.2016
 Page 2 / 7

ion:	2.0	Issue date: 31.08.2016	Page 2 / 7	
203-905-0 111-76-2 603-014-0		01-2119475108-36-xxxx 2-butoxyethanol Acute Tox. 4 H302 / Acute Tox. 4 H312 / Acute Tox. 4 H315 / Eye Irrit. 2 H319	H332 / Skin Irrit. 2	2,5 - 5
215-222-5 1314-13-2 030-013-0	2	01-2119463881-32 zinc oxide Aquatic Chronic 1 H410		1 - 2,5
61791-26	-2	Acute Tox. 4 H302 / Skin Irrit. 2 H315 / Eye Dam.	1 H318 / Aquatic	< 0,5

Additional information

Full text of classification: see section 16

Chronic 1 H410

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. Do not use solvents or thinners.

After eye contact

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

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

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 hazards arising from the substance or mixture

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

5.3. Advice 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. Treat runoff as hazardous.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ventilate affected area. Do not breathe vapours. 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.



Article No.: P384 Zowo-tec® 384

 Print date:
 02.09.2016
 Revision date: 31.08.2016
 EN

 Version:
 2.0
 Issue date: 31.08.2016
 Page 3 / 7

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). Clean using cleansing agents. Do not use solvents.

6.4. Reference to other sections

Observe protective provisions (see chapter 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. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

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. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Soils have to conform to the "Guidelines for avoidance of ignition hazards due to electrostatic charges (TRBS 2153)".

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. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

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

2-butoxyethanol

INDEX No. 603-014-00-0 / EC No. 203-905-0 / CAS No. 111-76-2

TWA: 123 mg/m3; 25 ppm

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 DIN EN 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.



Coating Systems

Article No.: P384 Zowo-tec® 384

 Print date:
 02.09.2016
 Revision date: 31.08.2016
 EN

 Version:
 2.0
 Issue date: 31.08.2016
 Page 4 / 7

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:

Physical state: liquid
Colour: refer to label
Odour: characteristic
Odour threshold: not applicable
pH at 20 °C: not applicable
Melting point/freezing point: not applicable

Initial boiling point and boiling range: 100 °C

Flash point: not applicable Evaporation rate: not applicable

Flammability (solid, gas):

burning time (s): not applicable

Upper/lower flammability or explosive limits:

Lower explosion limit:

Upper explosion limit:

Vapour pressure at 20 °C:

Vapour density:

not applicable

0,03 mbar

not applicable

Relative density:

Density at 20 °C: 1,31 g/cm³

Solubility(ies):

Water solubility (g/L) at 20 °C: completely miscible
Partition coefficient: n-octanol/water: See section 12.
Auto-ignition temperature: not applicable
Decomposition temperature: not applicable
Viscosity at °C: hochviskos
Explosive properties: not applicable
Oxidising properties: not applicable

9.2. Other information

solvent content:

Organic solvents: 4 Wt % Water: 38 Wt %

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 chapter 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 chapter 7. Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5. Incompatible materials



Coating Systems

Article No.: Print date: Version:

P384

Zowo-tec® 384

02.09.2016 Revision date: 31.08.2016 2.0 Issue date: 31.08.2016

Page 5 / 7

10.6. Hazardous decomposition products

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

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:

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

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

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 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

SECTION 13: Disposal considerations



Article No.: Print date:

P384 02.09.2016 Zowo-tec® 384

Version: 02.09.201

Revision date: 31.08.2016 Issue date: 31.08.2016 EN Page 6 / 7

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.

SECTION 14: Transport information

This mixture is not classified as dangerous according to international transport regulations (ADR/RID, IMDG, ICAO/IATA).

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

Additional information

Land transport (ADR/RID)

tunnel restriction code

Sea transport (IMDG)

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

Directive 2010/75/EU on industrial emissions

VOC-value (in g/L): 67,6

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).

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.			



Coating Systems

Article No.: P384 Zowo-tec® 384

 Print date:
 02.09.2016
 Revision date: 31.08.2016
 EN

 Version:
 2.0
 Issue date: 31.08.2016
 Page 7 / 7

203-905-0 2-butoxyethanol 01-2119475108-36-xxxx

111-76-2

215-222-5 zinc oxide 01-2119463881-32

1314-13-2

SECTION 16: Other information

Full text of classification in section 3:

Acute Tox. 4 / H302 Acute toxicity (oral) Harmful if swallowed.

Acute Tox. 4 / H312 Acute toxicity (dermal) Harmful in contact with skin.

Acute Tox. 4 / H332 Acute toxicity (inhalative) Harmful if inhaled.

Skin Irrit. 2 / H315 skin corrosion/irritation Causes skin irritation.

Eye Irrit. 2 / H319 Serious eye damage/eye irritation Causes serious eye irritation.

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

effects.

Eye Dam. 1 / H318 Serious eye damage/eye irritation Causes serious eye damage.

Additional 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.



Coating Systems

Article No.: P421SEL Zowo-tec® 421

 Print date:
 02.09.2016
 Revision date: 01.09.2016
 EN

 Version:
 3.0
 Issue date: 01.09.2016
 Page 1 / 7

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

1.1. product identifiers

Article No. (manufacturer/supplier): P421SEL Identification of the substance or mixture Zowo-tec® 421

Glaze UV+, colorless, silk glo

Basis EL

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

Relevant identified uses

Coating material for wood

1.3. Details of the supplier of the safety data sheet

supplier (manufacturer/importer/downstream user/distributor)

Zobel Chemie GmbH

Weinsheimer Str. 59 Telephone: +49-6241-3002-0 D-67547 Worms Telefax: +49-6241-37690

Dept. responsible for information:

Laboratory

E-mail (competent person) labor@zobel-coatings.de

1.4. Emergency telephone number

Giftinformationszentrum-Nord - 24h Hotline (deutsch und englisch): +49-(0)551-19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

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

Skin Sens. 1 / H317 Respiratory or skin sensitisation May cause an allergic skin reaction.

Aquatic Chronic 3 / H412 Hazardous to the aquatic environment Harmful 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



Warning

Hazard statements

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P261 Avoid breathing spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302 + P352 IF ON SKIN: Wash with plenty of water/.?.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

contains:

Bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate, Methyl(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate

reaction mass of

 $\alpha-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl) propionyl-\omega-hydroxypoly (oxyethylene) \ and \alpha-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl) propionyl-\omega-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl) propionyl-w-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl) propionyl-w-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl) propionyl-w-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl) propionyl-w-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl) propionyl-w-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl) propionyl-w-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl) propionyl-w-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl) propionyl-w-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl-w-3-(3-(3-(3H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl-w-3-(3-(3H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl-w-3-(3-(3H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl-w-3-(3-(3H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl-w-3-(3-(3H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl-w-3-(3H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl-w-3-(3H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl-w-3-(3H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl-w-3-(3H-benzotr$

-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)

Supplemental Hazard information (EU)

not applicable

2.3. Other hazards



Coating Systems

Article No.: Print date: Version:

P421SEL 02.09.2016 Zowo-tec® 421

Revision date: 01.09.2016 Issue date: 01.09.2016 EN Page 2 / 7

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Product description / chemical characterization

Description Aqueous acrylate system

Hazardous ingredients

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

EC No. CAS No.	REACH No. Chemical name	Wt %		
INDEX No.	classification: // Remark	111,70		
203-905-0	01-2119475108-36-xxxx			
111-76-2	2-butoxyethanol 1 - 2,5			
603-014-00-0	Acute Tox. 4 H302 / Acute Tox. 4 H312 / Acute Tox. 4 H332 / Skin Irrit. 2 H315 / Eye Irrit. 2 H319			
	01-2119491304-40-0000			
	Bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate,	0,5 - 1		
	Methyl(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate			
	Skin Sens. 1A H317 / Aquatic Acute 1 H400 / Aquatic Chronic 1 H410			
400-830-7	01-00000115075-76-0017			
607-176-00-3	reaction mass of	0,5 - 1		
	α -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl- ω -hydroxy			
	poly(oxyethylene) and			
	α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2			
	H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)			
	Skin Sens. 1 H317 / Aquatic Chronic 2 H411			

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. Do not use solvents or thinners.

After eye contact

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

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

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



Article No.: Print date:

Version:

P421SEL 02.09.2016

Zowo-tec® 421

Revision date: 01.09.2016 Issue date: 01.09.2016 EN Page 3 / 7

5.2. Special hazards arising from the substance or mixture

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

5.3. Advice 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. Treat runoff as hazardous.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ventilate affected area. Do not breathe vapours. 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). Clean using cleansing agents. Do not use solvents.

6.4. Reference to other sections

Observe protective provisions (see chapter 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. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

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. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Soils have to conform to the "Guidelines for avoidance of ignition hazards due to electrostatic charges (TRBS 2153)".

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. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

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

2-butoxyethanol

INDEX No. 603-014-00-0 / EC No. 203-905-0 / CAS No. 111-76-2

TWA: 123 mg/m3; 25 ppm

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



Article No.: P421SEL Zowo-tec® 421

 Print date:
 02.09.2016
 Revision date: 01.09.2016
 EN

 Version:
 3.0
 Issue date: 01.09.2016
 Page 4 / 7

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 DIN EN 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:

Physical state: liquid
Colour: refer to label
Odour: characteristic
Odour threshold: not applicable
pH at 20 °C: not applicable
Melting point/freezing point: not applicable

Initial boiling point and boiling range: 100 °C

Flash point: not applicable Evaporation rate: not applicable

Flammability (solid, gas):

burning time (s): not applicable

Upper/lower flammability or explosive limits:

Lower explosion limit: not applicable
Upper explosion limit: not applicable
Vapour pressure at 20 °C: 0,02 mbar
Vapour density: not applicable

Relative density:

Density at 20 °C: 1,04 g/cm³

Solubility(ies):

Water solubility (g/L) at 20 °C: completely miscible
Partition coefficient: n-octanol/water: See section 12.
Auto-ignition temperature: not applicable
Decomposition temperature: not applicable
Viscosity at °C: hochvikos
Explosive properties: not applicable
Oxidising properties: not applicable

9.2. Other information

Safety Data Sheet

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



Coating Systems Article No.: P421SEL Zowo-tec® 421

02.09.2016

Print date: Revision date: 01.09.2016 Page 5 / 7 Issue date: 01.09.2016 Version:

solvent content:

2 Wt % Organic solvents: Water: 64 Wt %

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 chapter 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 chapter 7. Hazardous decomposition byproducts may form with exposure to high temperatures.

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.

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:

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

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

No information available.

Long-term Ecotoxicity



Article No.: P421SEL Zowo-tec® 421

 Print date:
 02.09.2016
 Revision date: 01.09.2016
 EN

 Version:
 3.0
 Issue date: 01.09.2016
 Page 6 / 7

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 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

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.

SECTION 14: Transport information

This mixture is not classified as dangerous according to international transport regulations (ADR/RID, IMDG, ICAO/IATA).

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

Additional information

Land transport (ADR/RID)

tunnel restriction code

Sea transport (IMDG)

EmS-No. not applicable

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

not applicable



Coating Systems

Article No.: Print date: Version: P421SEL 02.09.2016 Zowo-tec® 421

Revision date: 01.09.2016 Issue date: 01.09.2016 EN Page 7 / 7

SECTION 15: Regulatory information

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

EU legislation

Directive 2010/75/EU on industrial emissions

VOC-value (in g/L): 33,4

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).

15.2. Chemical Safety Assessment

For the following substances of this preparation a chemical safety assessment has been carried out:

Chemical r	ame		REACH No.
2-butoxyeth	anol		01-2119475108-36-xxxx
•	2,2,6,6-pentamethyl 4,6,6-pentamethyl-4-piperidyl)sebaca		01-2119491304-40-0000
, ,	mass penzotriazol-2-yl)-5-tert-butyl-4-hyd	roxyphenyl)propiony	01-00000115075-76-0017 I
ω -hydroxypoly(oxyethylene) and α -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl ω -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionylo			
ω-3-(3-(2H- xypoly(oxye	3,	oxyphenyl)propionylo	1

SECTION 16: Other information

Full text of classification in section 3:

Acute Tox. 4 / H302	Acute toxicity (oral)	Harmful if swallowed.
Acute Tox. 4 / H312	Acute toxicity (dermal)	Harmful in contact with skin.
Acute Tox. 4 / H332	Acute toxicity (inhalative)	Harmful if inhaled.
Skin Irrit. 2 / H315	skin corrosion/irritation	Causes skin irritation.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
Skin Sens. 1A / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.
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 effects.
Skin Sens. 1 / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.
Aquatic Chronic 2 / H411	Hazardous to the aquatic environment	Toxic to aquatic life with long lasting effects.

Additional 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.

Annex

At present, sufficient data / information on exposure scenarios are not available, so that an evaluation of the preperation cannot yet be made.