according to Regulation (EC) No. 1907/2006 (REACH) according to Regulation (EU) 2020/878



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

1.1. Product identifier

Article No. (manufacturer/supplier) XZ60000ACJ10
Trade name/designation [Z] ZowoSmart®
BrushX Plus

farblos

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

Relevant identified uses

paint and/or paint related material

Reserved for industrial and professional use.

1.3. Details of the supplier of the safety data sheet

supplier (manufacturer/importer/downstream user/distributor)

Berger-Zobel GmbH

 Coating Systems
 Telephone: +49 6359 / 8005-0

 Maybachstraße 2
 Telefax: +49 6359 / 8005-170

67269 Grünstadt

Department responsible for information:

Laboratory

E-mail Sicherheitsdaten@berger-zobel.de

1.4. Emergency telephone number

24-hour emergency number: +49 700 24112112

(BLG)

24-hour emergency number in side USA: +1 872 5888271 or +11 49 700 24112112 (BLG)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

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

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

2.2. Label elements

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

Hazard pictograms



Warning

Hazard statements

H317 May cause an allergic skin reaction.

Precautionary statements

P280 Wear protective gloves and eye/face protection.

Hazard components for labelling

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

Supplemental hazard information

not applicable

2.3. Other hazards

No information available.

Other information: If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Description

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

according to Regulation (EC) No. 1907/2006 (REACH) according to Regulation (EU) 2020/878



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EC No. CAS No. Index No.	REACH No. Designation classification // Remark	weight-%
603-798-4 134180-76-0	Polyether-modified polysiloxane Acute Tox. 4 H332 / Eye Irrit. 2 H319 Acute toxicity estimate (ATE): ATE (inhalation, vapour): 1,08 mg/L	1 - 2,5
220-239-6 2682-20-4 613-326-00-9	01-2120764690-50-XXXX 2-methylisothiazol-3(2H)-one Acute Tox. 2 H330 / Acute Tox. 3 H311 / Acute Tox. 3 H301 / Skin Corr. 1B H314 / Eye Dam. 1 H318 / Skin Sens. 1A H317 / Aquatic Acute 1 H400 (M = 10) / Aquatic Chronic 1 H410 (M = 1) / EUH071 Specific concentration limit (SCL): Skin Sens. 1A H317 >= 0,0015 Acute toxicity estimate (ATE): ATE (oral): 285 mg/kg bw / ATE (dermal): 2000 mg/kg bw	< 0,1
220-120-9 2634-33-5 613-088-00-6	01-2120761540-60-XXXX 1,2-benzisothiazol-3(2H)-one Acute Tox. 4 H302 / Acute Tox. 2 H330 / Skin Irrit. 2 H315 / Eye Dam. 1 H318 / Skin Sens. 1 H317 / Aquatic Acute 1 H400 (M = 1) / Aquatic Chronic 2 H411 Specific concentration limit (SCL): Skin Sens. 1 H317 >= 0,05 Acute toxicity estimate (ATE): ATE (oral): 1150 mg/kg bw	< 0,1

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.

Following 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

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media

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

according to Regulation (EC) No. 1907/2006 (REACH) according to Regulation (EU) 2020/878



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containers that are near the source of the fire. Do

Provide a conveniently located respiratory protective device. Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours.

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 section 7 and 8).

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advices on safe handling

Avoid formation of flammable and explosive vapour concentrations in the air and exceeding the exposure limit values. Only use the material in places where open light, fire and other flammable sources can be kept away. Electrical equipment must be protected meeting the accepted standard. Keep away from heat sources, sparks and open flames. Use only spark proof tools. Avoid contact with skin, eyes and clothes. Do not inhale dusts, particulates and spray mist when using this preparation. 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.

Further information

Vapours are heavier than air. Vapours form explosive mixtures with air.

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 (TRGS 727)".

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 25 °C. Protect from heat and direct sunlight.

Due to the content of organic solvents in the preparation:

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.

Personal protection equipment

Respiratory protection

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection

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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: Butyl caoutchouc (butyl rubber)

Thickness of the glove material > 0,4 mm; Breakthrough time: > 480 min.

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

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

Eye/face protection

Wear closely fitting protective glasses in case of splashes.

Body protection

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 section 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Colour: refer to chapter 1.

Odour: characteristic

Odour threshold: not applicable

Melting point/freezing point: not applicable

Initial boiling point and boiling range: 100 °C

Source: Water

Flammability: Combustible liquid.

Lower and upper explosion limit:

Lower explosion limit: not applicable Upper explosion limit: not applicable

Flash point: 104 °C

Auto-ignition temperature: not applicable Decomposition temperature: not applicable

pH at 20 °C: not applicable Cinematic viscosity (40°C): < 20 mm²/s

Viscosity at 20 °C: 11 s 4 mm

Method: DIN 53211

Solubility(ies):

Water solubility at 20 °C: miscible

Partition coefficient: n-octanol/water: see section 12

Vapour pressure at 20 °C: 23 mbar

Method: calculated. Source: Water

Density and/or relative density:

Density at 20 °C: 1,02 g/cm³

Method: ISO 2811, part 3

Relative vapour density: not applicable particle characteristics: not applicable

9.2. Other information

according to Regulation (EC) No. 1907/2006 (REACH) according to Regulation (EU) 2020/878



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Solid content: 8,46 weight-%

solvent content:

Organic solvents: 40 weight-% Water: 52 weight-%

< 3 weight-% (ADR/RID) Solvent separation test:

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

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

10.4. Conditions to avoid

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7. Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5. Incompatible materials

not applicable

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

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

2-methylisothiazol-3(2H)-one oral, LD50, Rat: 285 mg/kg dermal, LD50, Rat: > 2000 mg/kg inhalative (vapours), LC50, Rat (4 h)

Polyether-modified polysiloxane oral, LD50, Rat: > 2000 mg/kg

Method: OECD 401

dermal, LD50, Rat: > 2000 mg/kg

Method: OECD 402

inhalative (dust and mist), LC50, Rat: 1,08 mg/L (4 h)

Method: OECD 403

1,2-benzisothiazol-3(2H)-one oral, LD50, Rat: 1150 mg/kg dermal, LD50, Rat: > 2000 mg/kg inhalative (vapours), LC50, Rat

Skin corrosion/irritation; Serious eye damage/eye irritation

2-methylisothiazol-3(2H)-one

Skin (4 h) eves

Polyether-modified polysiloxane

eyes, Rabbit: Evaluation non-irritant.

Method: OECD 405

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

Skin eyes

Respiratory or skin sensitisation

May cause an allergic skin reaction.

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

according to Regulation (EC) No. 1907/2006 (REACH) according to Regulation (EU) 2020/878



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Skin:

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Based on available data, the classification criteria are not met.

STOT-single exposure; STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Practical experience/human evidence

Inhaling of solvent components above the MWC-value can lead to health damage, e.g. irritation of the mucous membrane and respiratory organs, as well as damage to the liver, kidneys and the central nerve system. Indications for this are: headache, dizziness, fatigue, amyosthenia, drowsiness, in serious cases: unconsciousness. Solvents may cause some of the aforementioned effects through skin resorption. 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.

11.2. Information on other hazards

Endocrine disrupting properties

No information available.

SECTION 12: Ecological information

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

2-methylisothiazol-3(2H)-one

Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 6 mg/L (96 h)

Daphnia toxicity, EC50: 1,68 mg/L (48 h)

Algae toxicity, ErC50

Algae toxicity, EC50, Pseudokirchneriella subcapitata: 0,157 mg/L (72 h)

Polyether-modified polysiloxane

Fish toxicity, LC50, Lepomis macrochirus (Bluegill): 15 mg/L (96 h)

Daphnia toxicity, EC50, Daphnia magna (Big water flea): 177 mg/L (48 h)

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

Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 1,6 mg/L (96 h)

Daphnia toxicity, EC50, Daphnia magna (Big water flea): 2,94 mg/L (48 h)

Algae toxicity, EC50, Pseudokirchneriella subcapitata: 0,11 mg/L (72 h)

Long-term Ecotoxicity

2-methylisothiazol-3(2H)-one

Fish toxicity, LC50 (96 h)

activated sludge, EC20, activated sludge: 2,8 mg/L (3 h)

Method: DIN 38412-3 (TTC-Test)

activated sludge, EC50, activated sludge; 34.6 mg/L (3 h)

Method: DIN 38412-3 (TTC-Test)

12.2. Persistence and degradability

2-methylisothiazol-3(2H)-one

: 50 % (4 D)

Method: OECD 309 : 90 % (14 D)

Method: OECD 309

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

OECD 302B: 90 %; Evaluation Does not accumulate in organisms.

Activated sludge

OECD 303A: > 70 %; Evaluation Does not accumulate in organisms.

Activated sludge

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12.3. Bioaccumulative potential

2-methylisothiazol-3(2H)-one

Partition coefficient n-octanol / Water (log Kow): 0,32

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

Partition coefficient: n-octanol/water: 0,7; Evaluation The aquatic toxic ingredients are biodegradable.

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. Endocrine disrupting properties

No information available.

12.7. Other adverse effects

No information available.

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

*Hazardous waste according to Directive 2008/98/EC (waste framework directive).

Appropriate disposal / Package

Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

No dangerous good in sense of this transport regulation.

14.1. UN number or ID number

not applicable

14.2. UN proper shipping name

14.3. Transport hazard class(es)

not applicable

14.4. Packing group

not applicable

14.5. Environmental hazards

Land transport (ADR/RID) not applicable
Marine pollutant not applicable

14.6. Special precautions for user

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

Advices on safe handling: see parts 6 - 8

Further information

Land transport (ADR/RID)

Tunnel restriction code

Sea transport (IMDG)

EmS-No. not applicable

14.7. Maritime transport in bulk according to IMO instruments

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No transport as bulk according IBC - Code.

SECTION 15: Regulatory information

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

EU legislation

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]

This product is not classified according to Directive 2012/18/EU.

Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]

VOC-value (in g/L) ISO 11890-2: 409 VOC-value (in g/L) ASTM D2369: 866

National regulations

Restrictions of occupation

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

Other information:

Switzerland:

Volatile organic compounds (VOC) content in percent by weight: 0

Denmark PR-No.:

MAL code (MAL code in mixture):

15.2. Chemical Safety Assessment

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

SECTION 16: Other information

Full text of classification in section 3:

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

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

Acute Tox. 2 / H330 Acute toxicity (inhalative) Fatal if inhaled.

Acute Tox. 3 / H311 Acute toxicity (dermal) Toxic in contact with skin.

Acute Tox. 3 / H301 Acute toxicity (oral) Toxic if swallowed.

Skin Corr. 1B / H314 Skin corrosion/irritation Causes severe skin burns and eye damage.

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

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.

Acute Tox. 4 / H302 Acute toxicity (oral) Harmful if swallowed.
Skin Irrit. 2 / H315 Skin corrosion/irritation Causes skin irritation.

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.

Classification procedure

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

Skin Sens. 1 Respiratory or skin sensitisation Calculation method.

Abbreviations and acronyms

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road

OEL Occupational Exposure Limit Value

BLV Biological Limit Value
CAS Chemical Abstracts Service

CLP Classification, Labelling and Packaging CMR Carcinogenic, Mutagenic and Reprotoxic

DIN German Institute for Standardization / German industrial standard

DNEL Derived No-Effect Level

EAKV European Waste Catalogue Directive

EC Effective Concentration
EC European Community
EN European Standard

IATA-DGR International Air Transport Association – Dangerous Goods Regulations

IBC Code International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

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International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous

Goods by Air

IMDG Code International Maritime Code for Dangerous Goods ISO International Organization for Standardization

LC Lethal Concentration

LD Lethal Dose

MARPOL Maritime Pollution: The International Convention for the Prevention of Pollution from Ships

OECD Organisation for Economic Cooperation and Development

PBT persistent, bioaccumulative, toxic PNEC Predicted No Effect Concentration

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

RID Regulations concerning the International Carriage of Dangerous Goods by Rail

UN United Nations

VOC Volatile Organic Compounds

vPvB very persistent and very bioaccumulative

Further information

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

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in section 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.