EC No.

CAS No.

Index No.

REACH No.

Designation

Article Print o Versio	date:	XPB60002LK10 25.04.2023 3.0001	[Z] ZowoTec® 425 Revision date: 17.0 Issue date: 17.03.2		EN Page 1 / 8	Coating Systems
SEC	TION 1: Id	entification of the	e substance/mixtu	re and of the comp	any/undertaking	
1.1.		lentifier (manufacturer/supp e/designation	lier)	XPB60002LK10 [Z] ZowoTec® 425 TopCoat HighSolid, Basis EL	matt	
1.2.	Relevant i	dentified uses of tl	ne substance or mix	ture and uses advise	ed against	
	paint and/c	dentified uses or paint related mate for industrial and pro				
1.3.		the supplier of the	-			
	supplier (r Berger-Zot		rter/downstream us	er/distributor)		
	Coating Sy Maybachst 67269 Grü	rstems raße 2		Telephone: +49 635 Telefax: +49 6359 / 8		
	Departme Laboratory E-mail	nt responsible for i	nformation:	Sicherheitsdaten@b	erger-zobel de	
1.4.	Emergenc 24-hour en (BLG)	y telephone numbe hergency number: + hergency number in	49 700 24112112	88271 or +11 49 700 1		
SEC		azards identificat			. ,	
2.1.		tion of the substan				
Classification according to Regulation (EC) No 1272/2008 [CLP]						
	The mixtur	e is classified as no	t hazardous according	g to regulation (EC) No	o 1272/2008 [CLP].	
2.2.	Label elen		lation (EC) No. 1272			
Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms						
	•	5				
	Hazard sta	atements not appl	icable			
	Precaution	n ary statements not appl	icable			
	Hazard co	mponents for labe not appl	-			
	Suppleme EUH208 EUH210			3(2H)-one. May produc n request.	ce an allergic reactio	n.
2.3.	Other haza	ards				
	No informa	tion available.				
		rmation: If medical Read label before u		ave product contain	er or label at hand.	Keep out of reach of
SEC	TION 3: Co	omposition/inform	nation on ingredie	ents		
3.2.	Mixtures					
	Descriptio					
	Classificat EC No.	tion according to F REACH	Regulation (EC) No 1	272/2008 [CLP]		

[Z] ZOBEL

weight-%

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	classifi	cation // Remark	

ZOBEL

ms

Additional information		
603-096-00-8	Eye Irrit. 2 H319	
112-34-5	2-(2-butoxyethoxy)ethanol	1 - 2,5
203-961-6	01-2119475104-44-XXXX	

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.

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

Advice for firefighters 5.3.

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.

Environmental precautions 6.2.

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.

Methods and material for containment and cleaning up 6.3.

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

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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:

2-(2-butoxyethoxy)ethanol Index No. 603-096-00-8 / EC No. 203-961-6 / CAS No. 112-34-5 WEL, TWA: 67,5 mg/m3; 10 ppm WEL, STEL: 101,2 mg/m3; 15 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.

Personal protection equipment

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: 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



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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: Colour:	Liquid 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:	not applicable
Lower and upper explosion limit:	
Lower explosion limit:	0,69 Vol-%
Upper explosion limit:	5,9 Vol-% Source: 2-(2-butoxyethoxy)ethanol
Flash point:	not applicable
Auto-ignition temperature:	225 °C
Auto-ignition temperature.	Source: 2-(2-butoxyethoxy)ethanol
Decomposition temperature:	not applicable
pH at 20 °C:	not applicable
Viscosity at °C:	hochviskos
Solubility(ies):	
Water solubility at 20 °C:	partially soluble
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:	1,04 g/cm³
-	Method: ISO 2811, part 3
Relative vapour density:	not applicable
particle characteristics:	not applicable
Other information	
Solid content:	39,99 weight-%
solvent content:	
Organic solvents:	2 weight-%
Water:	58 weight-%
Solvent separation test:	< 3 weight-% (ADR/RID)
CTION 10: Stability and reactivity	

SECTION 10: Stability and reactivity

10.1. Reactivity

9.2.

No information available.

10.2. Chemical stability



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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-(2-butoxyethoxy)ethanol oral, LD50, Rat: 5660 mg/kg dermal, LD50, Rabbit: 2700 mg/kg

Skin corrosion/irritation; Serious eye damage/eye irritation

2-(2-butoxyethoxy)ethanol

Skin slightly irritand eyes: Evaluation Irritation

Respiratory or skin sensitisation

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

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-(2-butoxyethoxy)ethanol

Fish toxicity, LC50, Lepomis macrochirus (Bluegill): 1300 mg/L (96 h) Daphnia toxicity, EC50, Daphnia magna (Big water flea): > 100 mg/L (48 h)

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Long-term Ecotoxicity

Toxicological data are not available.

12.2. Persistence and degradability

2-(2-butoxyethoxy)ethanol Biodegradation:: > 0 % 0 - 93 % (28 d) Method: OECD 302B

12.3. Bioaccumulative potential

2-(2-butoxyethoxy)ethanol

Partition coefficient: n-octanol/water: 0,15 - 0,9; Evaluation not bioaccumu able

Bioconcentration factor (BCF)

2-(2-butoxyethoxy)ethanol Bioconcentration factor (BCF): 0,46

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

080112 waste paint and varnish other than those mentioned in 08 01 11

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



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Causes serious eye irritation.

Land transport (ADR/RID)

Tunnel restriction code

Sea transport (IMDG)

EmS-No.

not applicable

14.7. Maritime transport in bulk according to IMO instruments

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: 24 VOC-value (in g/L) ASTM D2369: 60

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: 2

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:

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

Abbreviations and acronyms

Abbrevi	ons 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-DO	International Air Transport Association – Dangerous Goods Regulations
IBC Cod	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO-TI	International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous
	Goods by Air
IMDG C	e International Maritime Code for Dangerous Goods
ISO	International Organization for Standardization
LC	Lethal Concentration
LD	Lethal Dose
MARPO	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



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REACH RID UN VOC vPvB	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulations concerning the International Carriage of Dangerous Goods by Rail United Nations Volatile Organic Compounds 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.