

Article No.: XP770004LJ10 [Z] ZowoTec® 480  
Print date: 30.09.2021 Revision date: 11.09.2021 15117 EN 507559  
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## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Article No. (manufacturer/supplier) XP770004LJ10  
Trade name/designation [Z] ZowoTec® 480  
TopCoat COLOR, seidenglänzend  
Basis C

### 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: +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 not hazardous according to regulation (EC) No 1272/2008 [CLP].

### 2.2. Label elements

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

#### Hazard pictograms

#### Hazard statements

not applicable

#### Precautionary statements

not applicable

#### Hazard components for labelling

not applicable

#### Supplemental hazard information

EUH208 Contains 1,2-benzisothiazol-3(2H)-one; reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1) . May produce an allergic reaction.

EUH210 Safety data sheet available on request.

### 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]

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EC No. CAS No. Index No.	REACH No. Designation classification // Remark	weight-%
203-905-0 111-76-2 603-014-00-0	01-2119475108-36-XXXX 2-butoxyethanol Acute Tox. 4 H332 / Acute Tox. 4 H312 / Acute Tox. 4 H302 / Eye Irrit. 2 H319 / Skin Irrit. 2 H315	1 - 2,5

**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.

**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**

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**

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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:

2-butoxyethanol

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

WEL, TWA: 123 mg/m<sup>3</sup>; 25 ppm

WEL, STEL: 246 mg/m<sup>3</sup>; 50 ppm

Remark: (may be absorbed through the skin)

BMGV, TWA: 240 mmol/mol creatinine

Remark: Butoxyacetic acid; urine; end of exposure or end of shift

#### Additional information

TWA : Long-term occupational exposure limit value

STEL : short-term occupational exposure limit value

Ceiling : peak limitation

#### DNEL:

2-butoxyethanol

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

DNEL acute dermal, short-term (systemic), Workers: 89 mg/kg

DNEL long-term dermal (systemic), Workers: 75 mg/kg

DNEL acute inhalative (local), Workers: 50 ppm

DNEL acute inhalative (systemic), Workers: 135 ppm

DNEL long-term inhalative (systemic), Workers: 20 ppm

DNEL short-term oral (acute), Consumer: 13,4 mg/kg

DNEL long-term oral (repeated), Consumer: 3,2 mg/kg

DNEL acute dermal, short-term (systemic), Consumer: 44,5 mg/kg

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DNEL long-term dermal (systemic), Consumer: 38 mg/kg  
DNEL acute inhalative (local), Consumer: 123 mg/m<sup>3</sup>  
DNEL acute inhalative (systemic), Consumer: 426 mg/m<sup>3</sup>  
DNEL long-term inhalative (systemic), Consumer: 49 mg/m<sup>3</sup>

**PNEC:**

2-butoxyethanol  
Index No. 603-014-00-0 / EC No. 203-905-0 / CAS No. 111-76-2  
PNEC aquatic, freshwater: 8,8 mg/L  
PNEC aquatic, marine water: 0,88 mg/L  
PNEC sediment, freshwater: 34,6 mg/kg  
PNEC sediment, marine water: 3,46 mg/kg  
PNEC, soil: 2,8 mg/kg  
PNEC sewage treatment plant (STP): 463 mg/L

**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**

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**

**Appearance:**

**Physical state:** Liquid  
**Colour:** refer to chapter 1.

**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: water

**Flash point:** not applicable

**Evaporation rate:** not applicable

**flammability**

**Burning time:** not applicable

**Upper/lower flammability or explosive limits:**

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

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<b>Vapour pressure at 20 °C:</b>	<b>23 mbar</b> Method: calculated. Source: water
<b>Vapour density:</b>	<b>not applicable</b>
<b>Relative density:</b>	
<b>Density at 20 °C:</b>	<b>1,03 g/cm<sup>3</sup></b>
<b>Solubility(ies):</b>	
<b>Water solubility at 20 °C:</b>	<b>partially soluble</b>
<b>Partition coefficient: n-octanol/water:</b>	<b>see section 12</b>
<b>Auto-ignition temperature:</b>	<b>not applicable</b>
<b>Decomposition temperature:</b>	<b>not applicable</b>
<b>Viscosity at °C:</b>	<b>hochviskos</b>
<b>Explosive properties:</b>	<b>not applicable</b>
<b>Oxidising properties:</b>	<b>not applicable</b>
9.2. <b>Other information</b>	*
<b>Solid content:</b>	<b>32,47 weight-%</b>
<b>solvent content:</b>	
<b>Organic solvents:</b>	<b>3 weight-%</b>
<b>Water:</b>	<b>65 weight-%</b>
<b>Solvent separation test:</b>	<b>&lt; 3 weight-% (ADR/RID)</b>

## 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

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

No data on preparation itself available.

### 11.1. Information on toxicological effects

#### Acute toxicity

2-butoxyethanol

oral, LD50, Rat: 1746 mg/kg

dermal, LD50, Rat: 2275 mg/kg ; Evaluation The product is skin resorptive.

dermal, LD50, Rabbit: 2700 mg/kg

inhalative (vapours), LC50, Rat 2 - 20 mg/L (4 h)

#### Skin corrosion/irritation; Serious eye damage/eye irritation

2-butoxyethanol

Skin (4 h)

Irritating to skin.

eyes: Evaluation strong caustic effect involving danger of serious eye damages

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Respiratory system: Evaluation Irritating to respiratory system.

#### **Respiratory or skin sensitisation**

2-butoxyethanol

#### **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.

### **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-butoxyethanol

Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 1474 mg/L (96 h)

Daphnia toxicity, EC50, Daphnia magna (Big water flea): 1550 mg/L (48 h)

Method: OECD 202

Algae toxicity, ErC50, Pseudokirchneriella subcapitata: 1840 mg/L (72 h)

Method: OECD 201

#### **Long-term Ecotoxicity**

2-butoxyethanol

Daphnia toxicity, NOEC, Daphnia magna (Big water flea): 100 mg/L (21 D)

Method: OECD 211

#### **12.2. Persistence and degradability**

2-butoxyethanol

Biodegradation: 90 % (28 D)

Method: OECD 301B

#### **12.3. Bioaccumulative potential**

2-butoxyethanol

Partition coefficient: n-octanol/water: 0,81

#### **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**

No information available.

### **SECTION 13: Disposal considerations**

#### **13.1. Waste treatment methods**

**Appropriate disposal / Product**

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#### 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

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. 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 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: 21

VOC-value (in g/L) ASTM D2369: 65

##### National regulations

##### Restrictions of occupation

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

##### Other information:

Denmark:

MAL-Kode (MAL Kode ready-to-use):

Switzerland:

Volatile organic compounds (VOC) content in percent by weight: 2

#### 15.2. Chemical Safety Assessment

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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.
Acute Tox. 4 / H312	Acute toxicity (dermal)	Harmful in contact with skin.
Acute Tox. 4 / H302	Acute toxicity (oral)	Harmful if swallowed.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
Skin Irrit. 2 / H315	Skin corrosion/irritation	Causes skin irritation.

### 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
ICAO-TI	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.

\* Data changed compared with the previous version