

Article No.: XPA40004LK10 [Z] ZowoTec® 444
Print date: 25.04.2023 Revision date: 17.03.2023
Version: 13.0002 Issue date: 17.03.2023

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

1.1. Product identifier

Article No. (manufacturer/supplier) XPA40004LK10
Trade name/designation [Z] ZowoTec® 444
TopCoat DoorX, seidenglänzend
Basis EL

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.
Aquatic Chronic 3 / H412	Hazardous to the aquatic environment	Harmful to aquatic life with long lasting effects.

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.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P280 Wear protective gloves and eye/face protection.

Hazard components for labelling

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl
1,2,2,6,6-pentamethyl-4-piperidyl sebacate
1,2-benzisothiazol-3(2H)-one
Hydroxyphenyl-benzotriazole derivatives

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

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3.2. Mixtures

Description

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

EC No. CAS No. Index No.	REACH No. Designation classification // Remark	weight-%
222-437-8 3470-98-2	01-2120062728-48-XXXX 1-butylpyrrolidin-2-one Acute Tox. 4 H302 / Skin Irrit. 2 H315 / Eye Irrit. 2 H319	2,5 - 5
400-830-7 607-176-00-3	01-0000015075-76-XXXX Hydroxyphenyl-benzotriazole derivatives Skin Sens. 1 H317 / Aquatic Chronic 2 H411	0,5 - 1
915-687-0 1065336-91-5	01-2119491304-40-XXXX Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate Skin Sens. 1A H317 / Repr. 2 H361 / Aquatic Acute 1 H400 / Aquatic Chronic 1 H410	0,25 - 0,5
215-647-6 1336-21-6 007-001-01-2	01-2119982985-14-XXXX ammonia Skin Corr. 1B H314 / Eye Dam. 1 H318 / STOT SE 3 H335 / Aquatic Acute 1 H400 / Aquatic Chronic 2 H411 Specific concentration limit (SCL): STOT SE 3 H335 >= 5	0,1 - 0,25
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 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

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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**

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:

ammonia

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

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WEL, TWA: 18 mg/m³; 25 ppm

WEL, STEL: 25 mg/m³; 35 ppm

Additional information

TWA : Long-term occupational exposure limit value

STEL : short-term occupational exposure limit value

Ceiling : peak limitation

DNEL:

ammonia

Index No. 007-001-01-2 / EC No. 215-647-6 / CAS No. 1336-21-6

DNEL long-term dermal (local), Workers: 2,8 mg/kg

DNEL long-term inhalative (local), Workers: 14 mg/m³

DNEL long-term inhalative (systemic), Workers: 47,6 mg/m³

DNEL short-term oral (acute), Consumer: 6,8 mg/kg

DNEL long-term oral (repeated), Consumer: 6,8 mg/kg

DNEL acute dermal, short-term (systemic), Consumer: 68 mg/kg

DNEL long-term dermal (systemic), Consumer: 68 mg/kg

DNEL acute inhalative (local), Consumer: 7,2 mg/m³

DNEL acute inhalative (systemic), Consumer: 23,8 mg/m³

DNEL long-term inhalative (local), Consumer: 2,8 mg/m³

DNEL long-term inhalative (systemic), Consumer: 23,8 mg/m³

PNEC:

ammonia

Index No. 007-001-01-2 / EC No. 215-647-6 / CAS No. 1336-21-6

PNEC aquatic, freshwater: 0,0011 mg/L

PNEC aquatic, marine water: 0,0011 mg/L

PNEC aquatic, intermittent release: 0,0068 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

Physical state:

Liquid

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Colour:	refer to chapter 1.
Odour:	characteristic
Odour threshold:	not applicable
Melting point/freezing point:	-79 °C Source: 1-butylpyrrolidin-2-one
Initial boiling point and boiling range:	100 °C Source: Water
Flammability:	not applicable
Lower and upper explosion limit:	
Lower explosion limit:	0,8 Vol-%
Upper explosion limit:	not applicable
Flash point:	not applicable
Auto-ignition temperature:	212 °C Source: 1-butylpyrrolidin-2-one
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:	1,06 g/cm³ Method: ISO 2811, part 3
Relative vapour density:	not applicable
particle characteristics:	not applicable
9.2. Other information	
Solid content:	35,99 weight-%
solvent content:	
Organic solvents:	4 weight-%
Water:	60 weight-%
Solvent separation test:	< 3 weight-% (ADR/RID)

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.

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SECTION 11: Toxicological information

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

Acute toxicity

1,2-benzisothiazol-3(2H)-one
oral, LD50, Rat: 1150 mg/kg
dermal, LD50, Rat: > 2000 mg/kg
inhalative (vapours), LC50, Rat (4 h)

Skin corrosion/irritation; Serious eye damage/eye irritation

1,2-benzisothiazol-3(2H)-one
Skin (4 h)
eyes

ammonia
Skin (4 h)

Respiratory or skin sensitisation

May cause an allergic skin reaction.

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

Hydroxyphenyl-benzotriazole derivatives
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

ammonia
Specific target organ toxicity (single exposure), Irritation

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

1,2-benzisothiazol-3(2H)-one
Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 2,18 mg/L (96 h)
Daphnia toxicity, EC50, Daphnia magna (Big water flea): 2,94 mg/L (48 h)
Algae toxicity, ErC50, Pseudokirchneriella subcapitata: 0,11 mg/L (96 h)
Algae toxicity, EC50: 0,067 mg/L (72 h)

ammonia
Fish toxicity, LC50 (96 h)

Long-term Ecotoxicity

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Harmful to aquatic life with long lasting effects.

1,2-benzisothiazol-3(2H)-one
activated sludge, EC20, activated sludge: 3,3 mg/L (3 h)
Method: OECD 209

Hydroxyphenyl-benzotriazole derivatives
Fish toxicity, LC50 (96 h)

ammonia
Fish toxicity, LC50 (96 h)

12.2. Persistence and degradability

1,2-benzisothiazol-3(2H)-one
: > 90 %
Method: OECD 303 A

12.3. Bioaccumulative potential

1,2-benzisothiazol-3(2H)-one
Partition coefficient n-octanol / Water (log Kow): 0,7

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

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

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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

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: 45

VOC-value (in g/L) ASTM D2369: 123

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

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

EC No. CAS No.	Designation	REACH No.
222-437-8 3470-98-2	1-butylpyrrolidin-2-one	01-2120062728-48-XXXX

SECTION 16: Other information

Full text of classification in section 3:

Acute Tox. 4 / H302	Acute toxicity (oral)	Harmful if swallowed.
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. 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.
Skin Sens. 1A / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.
Repr. 2 / H361	Reproductive toxicity	Suspected of damaging fertility or the unborn child (state specific effect if known) (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 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.
STOT SE 3 / H335	STOT-single exposure	May cause respiratory irritation.

Classification procedure

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

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

Skin Sens. 1 Respiratory or skin sensitisation Calculation method.
Aquatic Chronic 3 Hazardous to the aquatic environment 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
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.