according to US OSHA Hazard Communication Standard (29 CFR 1910.1200)

Zobel Coating Systems

ZZ29-0000-0AA Brilliance NeutralCleaner Konz Version 7.5 Revision date Jun 24, 2025

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

1.1 Product identifier

Trade name/designation

ZZ29-0000-0AA Brilliance NeutralCleaner Konz

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

paint and/or paint-related material

Relevant identified uses

Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet

Supplier

Berger-Zobel GmbH Coating Systems

Maybachstr. 2 Telephone: +49 6359 8005-0 67269 Grünstadt E-mail: info@berger-zobel.de Website: www.berger-zobel.de

Department responsible for information

E-mail (competent person) Sicherheitsdaten@berger-zobel.de

1.4 Emergency telephone number

Emergency telephone number

+1 872 5888271

24 hr. emergency phone number

SECTION 2: Hazards identification

1 Classification of the substance or mixture

according to US OSHA Hazard Communication Standard (29 CFR 1910.1200)

not applicable

2.2 Label elements

Labeling according to US OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazard pictograms

not applicable

Signal word

not applicable

Hazard statements

not applicable

Precautionary statements

not applicable

Hazard components for labelling

not applicable

2.3 Hazards not otherwise classified (HNOC)

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

SECTION 3: Composition/information on ingredients.

3.2 Mixtures

Description

Wassser, Lösemittel und Tenside

Hazardous ingredients

CAS No. EC No. Index No.	Substance name REACH No.	weight-%
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	166736-08-9 605-450-7	Oxiran, 2-Methyl-, Polymer mit Oxiran, Mono(2-propylheptyl)ether Acute Tox. 4 H302 / Eye Dam. 1 H318	3,00 < 5,00
*	68515-73-1 500-220-1	D-Glucopyranose,oligomeric,decyl octyl glycosides Eye Dam. 1 H318	2,00 < 2,50
*	67-63-0 200-661-7 603-117-00-0	isopropanol; isopropyl alcohol; propan-2-ol Flam. Liq. 2 H225 / Eye Irrit. 2 H319 / STOT SE 3 H336	0,500 < 1,00
*	5989-27-5 227-813-5 601-029-00-7	(R)-p-Mentha-1,8-dien Flam. Liq. 3 H226 / Asp. Tox. 1 H304 / Skin Irrit. 2 H315 / Skin Sens. 1B H317 / Aquatic Acute 1 H400 / Aquatic Chronic 3 H412	0,150 < 0,200
*	3811-73-2 223-296-5 613-344-00-7	Pyridine-2-thiol 1-oxide, sodium salt Acute Tox. 4 H302 / Acute Tox. 3 H311 / Skin Irrit. 2 H315 / Skin Sens. 1 H317 / Eye Irrit. 2 H31 / Acute Tox. 3 H331 / STOT RE 1 H372 / Aquatic Acute 1 H400 (M = 100,00) / Aquatic Chronic H411	

Remark

Full text of H-phrases: see section 16.

Regulation (EC) No. 648/2004 [Detergents regulation]

5% >= x < 15% non-ionic surfactants, < 5% perfumes

SECTION 4: First aid measures

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.

Following inhalation

In case of irregular breathing or respiratory arrest provide artificial respiration. Remove casualty to fresh air and keep warm and at rest.

Following skin contact

Remove contaminated, saturated clothing immediately. 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.

Self-protection of the first aider

First aider: Pay attention to self-protection!

4.2 Most important symptoms and effects, both acute and delayed

Symptoms

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

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 (CO2), 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

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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

Remove all 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

For containment

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).

For cleaning up

Clean using cleansing agents. Do not use solvents.

6.4 Reference to other sections

Safe handling: see section 7

Personal protection equipment: refer to section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling

Avoid contact with skin, eyes and clothes. Personal protection equipment: see 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.

Advices on general occupational hygiene

When using do not eat, drink or smoke.

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.

Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers.

Storage class

LGK10 - Combustible liquids that cannot be assigned to any of the above storage classes

Further information on storage conditions

Keep container tightly closed. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Store in a well-ventilated and dry room at temperatures between 5 °C and 25 °C.

7.3 Specific end use(s)

Observe technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

	CAS No.	Substance name	Source	Long-term /short-term (Spitzenbegrenzung)
*	34590-94-8	(2-methoxymethylethoxy)propanol	ACGIH	- / - (-) mg/m³
*	34590-94-8	(2-methoxymethylethoxy)propanol	IDLH	- / - (-) mg/m³
*	34590-94-8	(2-methoxymethylethoxy)propanol	NIOSH	600 / 900 (-) mg/m³ (may be absorbed through the skin)

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980 / - (-) mg/m³

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*	34590-94-8	(2-methoxymethylethoxy)propanol	OSHA	600 / - (-) mg/m³ (may be absorbed through the skin)
*	67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	ACGIH	492 / 984 (-) mg/m ³
*	67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	IDLH	- / - (-) mg/m³
*	67-63-0	isopropanol: isopropyl alcohol: propan-2-ol	NIOSH	980 / 1 225 (-) mg/m ³

Additional information

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67-63-0

Long-term: Long-term occupational exposure limit value short-term: short-term occupational exposure limit value

isopropanol; isopropyl alcohol; propan-2-ol

Biological limit values

CAS No.	Substance name	Source	Value/ Test material	
67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	ACGIH-BEI	40 mg/L / urine end of shift at end of work week	

OSHA

DNEL worker

CAS No.	Substance name	DNEL type	DNEL value
5989-27-5	(R)-p-Mentha-1,8-dien	DNEL long-term dermal (systemic)	9.5 mg/kg
5989-27-5	(R)-p-Mentha-1,8-dien	DNEL long-term inhalative (systemic)	66.7 mg/m³
68515-73-1	D-Glucopyranose,oligomeric,decyl octyl glycosides	Long-term – inhalation, systemic effects	420 mg/m ³
68515-73-1	D-Glucopyranose,oligomeric,decyl octyl glycosides	Long-term - dermal, systemic effects	595,000 mg/kg bw/day
67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	Long-term – inhalation, systemic effects	500 mg/m³
67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	Long-term - dermal, systemic effects	888 mg/kg bw/day

DNEL Consumer

	CAS No.	Substance name	DNEL type	DNEL value
	5989-27-5	(R)-p-Mentha-1,8-dien	DNEL long-term dermal (systemic)	4.8 mg/kg
	5989-27-5	(R)-p-Mentha-1,8-dien	DNEL long-term inhalative (systemic)	16.6 mg/m ³
*	68515-73-1	D-Glucopyranose,oligomeric,decyl octyl glycosides	Long-term – inhalation, systemic effects	124 mg/m³
*	68515-73-1	D-Glucopyranose,oligomeric,decyl octyl glycosides	Long-term - dermal, systemic effects	357,000 mg/kg bw/day
*	68515-73-1	D-Glucopyranose,oligomeric,decyl octyl glycosides	Long-term - oral, systemic effects	35.7 mg/kg bw/day
*	67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	Long-term – inhalation, systemic effects	89 mg/m³
*	67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	Acute - inhalation, systemic effects	178
*	67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	Long-term - dermal, systemic effects	319 mg/kg bw/day
*	67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	Long-term - oral, systemic effects	26 mg/kg bw/day

PNEC

CAS No.	Substance name	PNEC type	PNEC Value
5989-27-5	(R)-p-Mentha-1,8-dien	PNEC soil, freshwater	0.763 mg/kg
5989-27-5	(R)-p-Mentha-1,8-dien	PNEC sediment, marine water	0.385 mg/kg
5989-27-5	(R)-p-Mentha-1,8-dien	PNEC sediment, freshwater	3.85 mg/kg
5989-27-5	(R)-p-Mentha-1,8-dien	PNEC Secondary Poisoning	133 mg/kg

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5989-27-5	(R)-p-Mentha-1,8-dien	PNEC aquatic, marine water	1.4 μg/L
5989-27-5	(R)-p-Mentha-1,8-dien	PNEC sewage treatment plant (STP)	1.8 mg/L
5989-27-5	(R)-p-Mentha-1,8-dien	PNEC aquatic, freshwater	14 μg/L
68515-73-1	D-Glucopyranose,oligomeric,decyl octyl glycosides	aquatic, intermittent release	0.27 mg/L
68515-73-1	D-Glucopyranose,oligomeric,decyl octyl glycosides	aquatic, marine water	0.018 mg/L
68515-73-1	D-Glucopyranose,oligomeric,decyl octyl glycosides	sewage treatment plant	560 mg/L
68515-73-1	D-Glucopyranose,oligomeric,decyl octyl glycosides	sediment, freshwater	1.516 mg/kg sediment dw
68515-73-1	D-Glucopyranose,oligomeric,decyl octyl glycosides	sediment, marine water	0.152 mg/kg sediment dw
67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	PNEC soil, freshwater	28 mg/kg
67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	PNEC sediment, marine water	552 mg/kg
67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	PNEC sediment, freshwater	552 mg/kg
67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	PNEC Secondary Poisoning	160 mg/kg
67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	PNEC aquatic, marine water	140.9 mg/L
67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	PNEC aquatic, freshwater	140.9 mg/L
67-63-0	isopropanol; isopropyl alcohol; propan-2-ol	PNEC sewage treatment plant (STP)	2,251 mg/L

8.2 Exposure controls

Provide good ventilation. This can be achieved with local or room suction.

Personal protection equipment

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Hand protection

Suitable material: NBR (Nitrile rubber)
Thickness of the glove material >= 0.4 mm

Breakthrough time >= 480 min

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. 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

Skin protection

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

Eye/face protection

Eye glasses with side protection: EN 166

Body protection

When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn. Antistatic clothing including shoes are recommended.

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state Liquid
Colour colourless
Odour characteristic

pH at 20.0 °C (100%) 7 - 8 DIN EN ISO 19396-1

Melting point/freezing point -89.5 °C

Source: isopropanol; isopropyl alcohol; propan-2-ol

Initial boiling point and boiling range 82.3 °C

Source: isopropanol; isopropyl alcohol; propan-2-ol

Flash point 105 °C

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flammability not applicable
Lower explosion limit at 20°C 1.1 Vol-%

Source: (2-methoxymethylethoxy)propanol

Upper explosion limit at 20°C 14 Vol-%

Source: (2-methoxymethylethoxy)propanol

Vapour pressure at 20°C

Relative vapour density

Density at 20 °C

20.97 mbar

not applicable

1.00 kg/l

Water solubility at 20°C completely miscible Partition coefficient: n-octanol/water see section 12

Ignition temperature in °C 207 °C

Source: (2-methoxymethylethoxy)propanol

Decomposition temperature not determined Viscosity at 20 °C 20 mm²/s particle characteristics not applicable

9.2

SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

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

No further relevant information available.

10.6 Hazardous decomposition products

Decomposition products in case of fire: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

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

Skin corrosion/irritation

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

Serious eye damage/eye irritation

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

Respiratory or skin sensitisation

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

Overall assessment on CMR properties

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

STOT-single exposure

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

STOT-repeated exposure

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

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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, Dizziness, 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.

11.2 Information on other hazards

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

SECTION 12: Ecological information

12.1 Toxicity

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

12.2 Persistence and degradability

* isopropanol; isopropyl alcohol; propan-2-ol

Biodegradation = 2.32 %

Biodegradation = 62 %

12.3 Bioaccumulative potential

* isopropanol; isopropyl alcohol; propan-2-ol

Partition coefficient: n-octanol/water = 0.16

- * Partition coefficient: n-octanol/water = -2.38 (Pyridine-2-thiol 1-oxide, sodium salt)
- * Partition coefficient: n-octanol/water = 0.05 (isopropanol; isopropyl alcohol; propan-2-ol)

12.4 Mobility in soil

No information 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

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product/Packaging disposal

Do not empty into drains; dispose of this material and its container in a safe way.

Waste codes/waste designations according to EWC/AVV

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

Other disposal recommendations

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

SECTION 14: Transport information

14.1 UN number or ID number

not applicable

14.2 UN proper shipping name

Land transport (US DoT 49 CFR)

No dangerous good in sense of these transport regulations.

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Sea transport (IMDG)

No dangerous good in sense of these transport regulations.

Air transport (ICAO-TI / IATA-DGR)

No dangerous good in sense of these transport regulations.

14.3 Transport hazard class(es)

not applicable

14.4 Packing group

not applicable

14.5 Environmental hazards

Land transport (US DoT 49 CFR) not applicable Sea transport (IMDG) 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

14.7 Maritime transport in bulk according to IMO instruments

No transport as bulk according to IBC Code.

14.8 Additional information

Land transport (US DoT 49 CFR)

not applicable

Sea transport (IMDG)

not applicable

Air transport (ICAO-TI / IATA-DGR)

not applicable

SECTION 15: Regulatory information

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

National regulations

Observe in addition any national regulations!

SARA Title III Section 311/312 Hazard Categories:

Refer to section 2 of the safety data sheet.

This product contains max. 775 g/l g/l VOC (according to ASTM D2369).

SECTION 16: Other information

List of relevant hazard statements and/or precautionary statements from sections 2 to 15

	H225	Highly flammable liquid and vapour.
	H226	Flammable liquid and vapour.
	H302	Harmful if swallowed.
	H304	May be fatal if swallowed and enters airways.
*	H311	Toxic in contact with skin.
	H315	Causes skin irritation.
	H317	May cause an allergic skin reaction.
	H318	Causes serious eye damage.
*	H319	Causes serious eye irritation.
*	H331	Toxic if inhaled.
	H336	May cause drowsiness or dizziness

May cause drowsiness or dizziness. H336

Causes damage to organs (or state all organs affected, if known) through prolonged or repeated H372

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

the hazard).

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

Key literature references and sources for data

Data arise from reference works and literature.

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Abbreviations and acronyms

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

OEL: Occupational Exposure Limit Value

BLV: Biological limit values

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

EU/EEA: European Economic Area

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

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals

UN: United Nations

VOC: Volatile Organic Compounds

vPvB: very persistent and very bioaccumulative

Indication of changes

* Data changed compared with the previous version.

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