

Revision: 23.01.2023

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 23.01.2023

Version number 9 (replaces version 8)

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

1.1 Product identifier

Trade name: ZBK 325: RL/G Article number: 202706 · Description: Cleaning solution

- 1.2 Relevant identified uses of the substance or mixture and uses advised against:
 - · Product category: PC21 Laboratory chemicals
 - · Process category: PROC15 Use as laboratory reagent
 - * Application of the substance / the preparation: Cleaning of galvanic oxygen sensors
- 1.3 Details of the supplier of the safety data sheet
 - · Manufacturer/Supplier:

Xylem Analytics Germany GmbH WTW Am Achalaich 11 82362 Weilheim Germany

Tel. +49 881 183-0

- · Further information obtainable from: E-mail: Info.WTW@xylem.com
- 1.4 Emergency telephone number: Chemtrec: (USA & Canada) 800-424-9300 (International) 001 703-527-3887

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

· Classification according to Regulation (EC) No 1272/2008:



GHS05 corrosion

Met. Corr.1 H290 May be corrosive to metals.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

2.2 Label elements:

- Labelling according to Regulation (EC) No 1272/2008: The product is classified and labelled according to the CLP regulation.
 - Hazard pictograms:



GHS05

- · Signal word: Warning
- · Hazard statements:

H290 May be corrosive to metals. H315 Causes skin irritation.

H319 Causes serious eye irritation.

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Precautionary statements:

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Labelling of packages where the contents do not exceed 125 ml:

Hazard pictograms:



- · Signal word: Warning
- · Hazard statements: Void
- Precautionary statements:

P280 Wear protective gloves/protective clothing/eye protection/face protection.

· 2.3 Other hazards No further relevant information available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description:

Mixture, consisting of the following components:

Water, acetic acid

Dangerous components:			
CAS: 64-19-7	acetic acid	20 - < 25%	
EINECS: 200-580-7 Index number: 607-002-00-6	♠ Flam. Liq. 3, H226; ♦ Skin Corr. 1A, H314; ♦ Acute Tox. 4, H312; Acute Tox. 4, H332 Specific concentration limits: Skin Corr. 1A; H314: C ≥ 90 %		
	Skin Corr. 1B; H314: 25 % ≤ C < 90 %		
	Skin Irrit. 2; H315: 10 % ≤ C < 25 %		
	Eye Dam. 1; H318: C ≥ 25 % Eye Irrit. 2; H319: 10 % ≤ C < 25 %		

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· 4.1 Description of first aid measures

- · After inhalation: Supply fresh air or oxygen; call for doctor.
- After skin contact:

Wash with plenty of water.

Take off immediately all contaminated clothing and wash it before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing:

Make victim drink water immediately (2 glasses at most).

Do not induce vomiting (risk of perforation)

Do not attempt to neutralize.

Call a doctor immediately.

- · 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

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SECTION 5: Firefighting measures

- 5.1 Extinguishing media
 - Suitable extinguishing agents: The product is not flammable. Extinguishing agent to suit environment.
- 5.2 Special hazards arising from the substance or mixture Development of corrosive and flammable vapors in the event of fire.
- 5.3 Advice for firefighters
 - · Protective equipment: Wear self-contained respiratory protective device.
 - Additional information

Suppress gases/fumes/haze with water spray.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear personal protective equipment (see section 8).

· 6.2 Environmental precautions:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Wash off residuals with water.

Ensure adequate ventilation.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Wear personal protective equipment (see section 8)

- Information about fire and explosion protection: Development of explosive acetic acid/air mixtures possible when heated.
- · 7.2 Conditions for safe storage, including any incompatibilities
 - Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
 - · Information about storage in one common storage facility: Not required.
 - Further information about storage conditions: Store tigthly sealed at temperatures between 15 °C and 25 °C.
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

64-19-7 acetic acid

IOELV Short-term value: 50 mg/m³, 20 ppm

Long-term value: 25 mg/m³, 10 ppm

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

- · Appropriate engineering controls No further data; see item 7.
- Individual protection measures, such as personal protective equipment
 - General protective and hygienic measures:

Avoid contact with the eyes and skin.

Do not inhale gases / fumes / aerosols.

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Take off contaminated clothing and wash it before reuse.

Wash hands before breaks and at the end of work.

- Respiratory protection: Only required when fog or aerosols are generated or when the workplace is not sufficiently ventilated.
 - Recommended filter device for short term use: Filter E
- · Hand protection Protective gloves
 - · **Material of gloves** Nitrile rubber, NBR
- Butyl rubber, BR
 Eye/face protection Safety glasses
- · Environmental exposure controls

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical propertie	s
General Information	
Physical state	Fluid
· Colour:	Colourless
· Odour:	Pungent
· Melting point/freezing point:	Undetermined.
Boiling point or initial boiling point and boiling rang	e 100 °C
Flammability	Product is not flammable.
Flash point:	Not applicable.
pH at 20 °C	1.7
· Viscosity:	
· Kinematic viscosity	Not determined.
· Dynamic:	Not determined.
Solubility	
· water:	Fully miscible.
· Vapour pressure:	Not determined.
Density and/or relative density	
Density at 20 °C:	1.01 g/cm³
_	D 1 4 4 4 15 19
 Important information on protection of health and environment, and on safety. 	
· Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Information with regard to physical hazard classes	
S 1 7 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	
Explosives	Void
	Void Void
Explosives	
Explosives Flammable gases	Void
Explosives Flammable gases Aerosols	Void Void
Explosives Flammable gases Aerosols Oxidising gases Gases under pressure Flammable liquids	Void Void Void
Explosives Flammable gases Aerosols Oxidising gases Gases under pressure	Void Void Void
Explosives Flammable gases Aerosols Oxidising gases Gases under pressure Flammable liquids	Void Void Void Void
Explosives Flammable gases Aerosols Oxidising gases Gases under pressure Flammable liquids Flammable solids	Void Void Void Void Void
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- Organic peroxides
- Corrosive to metals
- May be corrosive to metals.
- Desensitised explosives

Void

Void

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
 - Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions

Violent reactions with strong alkalines an oxidants (e. g. chrome(VI) oxide, chromosulfuric acid, potassium permanganate, sodium peroxide, perchloric acid, phosphoros halides, hydrogen peroxide).

Formation of hydrogen possible with metals and alloys (risk of explosion).

- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: In case of fire, see section 5.

SECTION 11: Toxicological information

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

· Acute toxicity

No quantitative toxicity data are available for this product.

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

LD/LC50 values relevant for classification:

64-19-7 acetic acid

		3310 mg/kg (Rat)
		1060 mg/kg (Rabbit)
Inhalative	LC50	11.4 mg/l, 4 h (Rat) (IUCLID)

- · Skin corrosion/irritation Causes skin irritation.
- · Serious eye damage/irritation Causes serious eye irritation.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity 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.
- · Aspiration hazard Based on available data, the classification criteria are not met.
- 11.2 Information on other hazards

Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

64-19-7 acetic acid

EC50 47 mg/l, 24 h (Daphnia magna) (IUCLID)

LC50 75 mg/l, 96 h (Lepomis macrochirus) (IUCLID)

- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.

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- 12.4 Mobility in soil No further relevant information available.
- · 12.5 Results of PBT and vPvB assessment Not applicable.
- 12.6 Endocrine disrupting properties The product does not contain substances with endocrine disrupting properties.
- 12.7 Other adverse effects
 - General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

Recommendation

Disposal must comply with the relevant local regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose the special waste.

- · Uncleaned packaging:
 - Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

· Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14:	Transport	information

14.1 UN	number	or ID	number
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· ADR/RID, IMDG, IATA UN2790

14.2 UN proper shipping name

· IMDG, IATA ACETIC ACID SOLUTION

- · 14.3 Transport hazard class(es)
 - · ADR/RID, IMDG, IATA



· Class 8 Corrosive substances.

· Label

14.4 Packing group

· ADR/RID, IMDG, IATA

14.5 Environmental hazards:

· Marine pollutant: No

• 14.6 Special precautions for user Warning: Corrosive substances.

Hazard identification number (Kemler code):
 EMS Number:
 Segregation groups
 80
 F-A,S-B
 (SGG1) Acids

· Stowage Category

14.7 Maritime transport in bulk according to IMO

instruments Not applicable.

· ADR/RID

Limited quantities (LQ)
 Transport category
 Tunnel restriction code

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UN "Model Regulation":

UN 2790 ACETIC ACID SOLUTION, 8, III

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
 - Directive 2012/18/EU
 - · Named dangerous substances ANNEX I None of the ingredients is listed.
 - · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
 - DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Annex II

None of the ingredients is listed.

- · REGULATION (EU) 2019/1148
 - Annex I RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Relevant phrases

H226 Flammable liquid and vapour.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H332 Harmful if inhaled.

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Abbreviations and acronyms:

ICAO: International Civil Aviation Organisation

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society) LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PRT: Persistent Ricaccumulati

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids – Category 3

Met. Corr.1: Corrosive to metals – Category 1 Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2