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

#### **1.1 Product identifier**

Trade name: ZEISS Cleaning Fluid

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

Application of the substance / the preparation: Cleaning agent.

#### 1.3 Details of the supplier of the safety data sheet

#### Manufacturer/Supplier:

Carl Zeiss AG Carl-Zeiss-Strasse 22 73446 Oberkochen Deutschland, Germany Tel: 49-7364-20-6175 Email: photo@zeiss.de Web: www.zeiss.com/cameralenses

#### 1.4 Emergency telephone number(s):

Ireland - National Poisons Information Centre: +353 1 8379964. NHS Direct: 111 (England and Scotland), 0845 46 47 (Wales).

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008

This product is not classified as hazardous according to Regulation (EC) No 1272/2008.

#### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008: Not applicable.

Hazard pictograms: Not applicable.

Signal word: Not applicable.

Hazard statements: Not applicable.

#### Additional information:

Contains a mixture of: 5-chloro-2-methyl-2 H -isothiazol-3-one and 2-methyl-2 H -isothiazol-3-one (3:1) (4.5 ppm). May produce an allergic reaction.

2.3 Other hazards No further relevant information available.

Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable.

#### **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

Hazardous components:		
CAS: 112-34-5 EINECS: 203-961-6 Index number: 603-096-00	2-(2-butoxyethoxy)ethanol Eye Irrit. 2, H319 -8	<9%
CAS: 55965-84-9 Index number: 613-167-00	a mixture of: 5-chloro-2-methyl-2 H -isothiazol-3-one and 2-methyl- 5 2 H -isothiazol-3-one (3:1) (4.5 ppm) Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; Skin Corr. 1B, H314; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Sens. 1, H317	<0.03%
Non-hazardous components:		
CAS: 7732-18-5 Deior EINECS: 231-791-2	ized water	>90.97%

Additional information: Formaldehyde:512ppm

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For the wording of the listed risk phrases refer to section 16.

#### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

General information: No special measures required.

After inhalation: Move patient to fresh air, if symptoms persist consult a doctor.

After skin contact: Generally the product does not irritate the skin.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: If symptoms persist, consult doctor.

#### **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.

#### **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

#### Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

#### 5.2 Special hazards arising from the substance or mixture

No further relevant information available.

#### 5.3 Advice for firefighters

Protective equipment: No special measures required.

#### **SECTION 6: Accidental release measures**

#### **6.1 Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation.

#### **6.2 Environmental precautions**

Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.

#### 6.3 Methods and material for containment and cleaning up

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

#### 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 No special measures required.

Information about fire - and explosion protection: No special measures required.

#### 7.2 Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: None.

**7.3 Specific end use(s):** No further relevant information available.

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#### **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:		
112-34-5 2-(2-buto	kyethoxy)ethanol	
WEL (Great Britain)	Short-term value: 101.2 mg/m <sup>3</sup> , 15 ppm Long-term value: 67.5 mg/m <sup>3</sup> , 10 ppm	
IOELV (EU)	Short-term value: 101.2 mg/m³, 15 ppm Long-term value: 67.5 mg/m³, 10 ppm	
50-00-0 formaldehyde		
WEL (Great Britain)	Short-term value: 2.5 mg/m <sup>3</sup> , 2 ppm Long-term value: 2.5 mg/m <sup>3</sup> , 2 ppm	

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

#### 8.2 Exposure controls

#### Personal protective equipment

#### General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals. Wash hands before breaks and at the end of work. Keep away from foodstuffs, beverages and feed.

Respiratory protection: Not necessary if room is well-ventilated.

Protection of hands: Wear protective gloves if prolonged or repeated contact is likely.

Eye protection: Safety glasses with side-shields.

Body protection: No special measures required.

#### **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

#### **General Information**

Appearance: Form: Colour:	Liquid. Clear.
Odour: Odour threshold:	Odourless. Not determined.
pH-value:	7
Melting point/Melting range:	Not determined.
Boiling point/Boiling range:	Not determined.
Flash point:	100 ℃ (ASTM D93)
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	
Decomposition temperature:	Not determined.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits: Lower: Upper:	Not determined. Not determined.
Oxidising properties	Not determined.
Vapour pressure:	Not determined.

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CECTION 40. Stability and recetivi		
9.2 Other information	No further relevant information available.	
Kinematic:	Not determined.	
Dynamic:	Not determined.	
Viscosity:		
Partition coefficient (n-octanol/water): Not determined.		
Solubility in / Miscibility with Water:	Fully miscible.	
Evaporation rate	Not determined.	
Vapour density	Not determined.	
Relative density	Not determined.	
Density:	Not determined.	

### SECTION 10: Stability and reactivity

10.1 Reactivity No data available.

#### 10.2 Chemical stability

#### Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions No dangerous reactions known.

10.4 Conditions to avoid No further relevant information available.

10.5 Incompatible materials No further relevant information available.

10.6 Hazardous decomposition products No dangerous decomposition products known.

#### **SECTION 11: Toxicological information**

#### **11.1 Information on toxicological effects**

Acute	toxicity
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LD/LC50 values:	
112-34-5 2-(2-butoxyethoxy)ethanol	

		5660 mg/kg (Rat)
Dermal	LD50	4000 mg/kg (Rabbit)

#### Primary irritant effect:

Skin corrosion/irritation: Based on available data, the classification criteria are not met. Serious eye damage/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.

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction): 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.

#### **SECTION 12: Ecological information**

#### 12.1 Toxicity

Aquatic toxicity: No further relevant information available.

12.2 Persistence and degradability No further relevant information available.

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**12.3 Bioaccumulative potential** No further relevant information available.

**12.4 Mobility in soil** No further relevant information available.

#### Additional ecological information

#### **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.

**12.5 Results of PBT and vPvB assessment PBT:** Not applicable. **vPvB:** Not applicable.

12.6 Other adverse effects No further relevant information available.

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

#### **13.1 Waste treatment methods Recommendation:** Do not allow product to reach sewage system.

Smaller quantities can be disposed of with household waste.

#### Uncleaned packaging

Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information		
14.1 UN Number ADR, ADN, IMDG, IATA	Not applicable.	
14.2 UN proper shipping name ADR, ADN, IMDG, IATA	Not applicable.	
14.3 Transport hazard class(es)		
ADR, ADN, IMDG, IATA Class	Not applicable.	
14.4 Packing group ADR, IMDG, IATA	Not applicable.	
14.5 Environmental hazards Marine pollutant:	No	
14.6 Special precautions for user	Not applicable.	
14.7 Transport in bulk according to Annex I of MARPOL 73/78 and the IBC Code	Not applicable.	

#### **SECTION 15: Regulatory information**

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

No further relevant information available.

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

#### **SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### **Relevant phrases**

H301 Toxic if swallowed. H311 Toxic in contact with skin.

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H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

#### Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ICAO: International Civil Aviation Organisation ADR: Accord européen sur le transport 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 Acute Tox. 3: Acute toxicity, Hazard Category 3 Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2 Skin Sens. 1: Sensitisation - Skin, Hazard Category 1 Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1 Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Čategory 1