



MSDS Biocidal ZF
Composed according to EC-Directive 1907/2006/EC
Date of issue/last revision: 07.5.2008

1. Identification of the substance/preparation and the company/undertaking

Productnumber: WAK-ZF-1; WAK-ZF-6; WAK-ZF-12; WAK-ZF-5
Trade name: Biocidal ZF
Application: Special disinfectant to protect cell cultures from microbial contamination

Company Name: WAK-Chemie Medical GmbH
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2. Hazards identification

Special hazards: not classified as hazardous (acc. to: Annex I, Dir 1999/45/EC)

Biocidal ZF may be weakly irritant to eyes and mucosa in random cases.
Avoid contact with eyes and mucosa.
Do not breathe spray.

Erstellt: Florian Pobitschka	Gepflegt: Dr. W. Pobitschka	Freigegeben: Florian Pobitschka	Inkraftsetzung
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3. Composition/information on ingredients

Unique blend of quarternary ammonium compounds and non-hazardous auxilliary components (not listed).

Ingredients	CAS-#	EU-#	Concentration	Symbols	R-Phrases
Didecyldimethyl-ammoniumchlorid	7173-51-5	230-525-2	< 0,1 % w/w	C	R 22 R 34
C ₁₂ -C ₁₆ -Alkyldimethyl-ammoniumchlorid	68424-85-1	270-325-2	< 0,1 % w/w	C, N	R 21/22 R 34 R 50
Dikokosdimethyl-ammoniumchlorid	61789-77-3	263-087-6	< 0,1 % w/w	C, N	R22-34-50/53
EDTA	150-38-9	205-758-8	< 2 % w/w	Xi	R 36

(The R-phrases and symbols of paragraph 3 respectively 16 only apply to the undiluted active ingredients. They do not apply to the ready-to-use solution Biocidal ZF.)

4. First aid measures

In case of ingestion wash mouth with water, drink plenty of water.
 Rinse eyes thoroughly with water after eye contact.
 If medical condition worsens, consult a physician.
 Treat allergic reactions symptomatically.

5. Fire fighting measures

Non-inflammable, all extinguishing agents can be applied

6. Accidental release measures

Personal safety measures: Avoid contact with eyes and skin.

Ecological safety measures: Let not get in touch with surface waters, disposal via canalisation.

Cleaning measures: Take up with absorbant material, rinse with water, dispose via canalisation.

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7. Handling and storage

Avoid contact with eyes and mucosa. Wear protective clothing (Safety glasses, latex gloves).
Do not breathe spray.
Store light-protected at room temperature.

8. Exposure controls/personal protection

Active ingredients are non-volatile.
Limitation and surveillance of exposure at workplace is not necessary.
Avoid contact with eyes and mucosa. Wear protective clothing (Safety glasses, latex gloves).
Do not breathe spray.

9. Physical and chemical properties

Boiling point: 100° C
Appearance: farblose Flüssigkeit
pH-value: 8,5 +/- 0,5
Odour: odourless
Specific weight: 0,99 +/- 0,01 g/cm³
Solubility: without limit in water
flammability: non flammable
Chemical stability: stable at pH > 6

10. Stability and reactivity

Avoid temperatures above 35° C.
No decomposition if stored and applied as intended.

11. Toxicological Information

If used as intended no health-hazardous events are to be expected.
LD₅₀ rat: > 50 000 mg / kg body weight

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12. Ecological information

Component:

Didecyl dimethyl ammonium chloride

Ecotoxicological Data:

LC₅₀ 96 h fish: 0,48 mg/l

LC₅₀ 48 h daphnia: 0,03 mg/l

IC₅₀ 72 h algea: 0,01- 0,1 mg/l

Component:

C₁₂-C₁₆-alkyl-dimethylammoniumchlorid

Ecotoxicological Data:

LC₅₀ 96 h fish: 0,85 mg/l

LC₅₀ 48 h daphnia: 0,015 mg/l

IC₅₀ 72 h algea: 0,03 mg/l

Component:

Dikokosdimethylammoniumchlorid

Ecotoxicological Data:

LC₅₀ 96 h fish: 0,1 - 1 mg/l

LC₅₀ 48 h daphnia: 0,01 – 0,1 mg/l

IC₅₀ 72 h algea: 0,01 – 0,1 mg/l

Component:

EDTA

LC₅₀ 96 h fish: 10 - 100 mg/l

LC₅₀ 48 h daphnia magna: 100-500 mg/l

IC₅₀ 72 h algea: 0,3 mg/l

The previous figures refer to the undiluted components, they do not apply for the solution Biocidal ZF.

Biocidal ZF is not considered 'dangerous for the environment' according to EC Directive 1999/45.

Degradability:

Biocidal ZF contains only readily biologically or chemically degradable substances. The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents.

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13. Disposal considerations

Does not contain any substances that are not degradable in clarification plants. All compounds are sufficiently diluted in canalisation. Dispose via canalisation.

S61 – Avoid release to the environment – Refer to special instructions / Safety Data Sheets.

14. Transport information

No dangerous good by means of dangerous goods transport regulations.

This product is not regulated by ADR/RID, IMDG, ICAO/IATA.

Custom Tariffs Number: 38 22 0000 - Composed laboratory reagents

15. Regulatory information

This product is not classified as hazardous according to the EC directive 1999/45 /EC.

S-phrases:

S 23 – Do not breathe spray

S 24/25 – Avoid contact with skin and eyes

S 37/39 – Wear suitable protective gloves and eye/face protection

S61 – Avoid release to the environment – Refer to special instructions / Safety Data Sheets.

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16. Other information

Explanation of R-phrases and Symbols mentioned under paragraph 3.:

C – Corrosive

N – Dangerous for the environment

Xi - Irritant

R 21/22 Harmful in contact with skin and if swallowed.

R 22 – Harmful if swallowed.

R 34 – Causes burns.

R 36 – Irritating to eyes.

R 50 – Very toxic for aquatic organisms.

R 53 – May cause long-term adverse effect in the aquatic environment.

(The R-phrases and symbols of paragraph 3 respectively 16 only apply to the undiluted active ingredients. They do not apply to the ready-to-use solution Biocidal ZF.)

Composed by: Florian Pobitschka

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