

Safety Data Sheet

according to UK REACH Regulation

Quinolones Mix; 500 µg/mL in Methanol/NH₄OH 95:5 (Mix B)

Revision date:

Product code: CH-MIX005-AMP

Page 1 of 9

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

1.1. Product identifier

Quinolones Mix; 500 µg/mL in Methanol/NH₄OH 95:5 (Mix B)

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

Use of the substance/mixture

Reference standard for analysis.

1.3. Details of the supplier of the safety data sheet

Company name: WITEGA Laboratorien Berlin-Adlershof GmbH
Street: James-Franck-Strasse 4
Place: D-12489 Berlin
Telephone: +493063922001 Telefax: +493063922007
e-mail: witega@witega.de
Internet: www.witega.de

1.4. Emergency telephone number:

+493063922001

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Hazard Statements:
Highly flammable liquid and vapour.
Toxic if swallowed, in contact with skin or if inhaled.
Causes severe skin burns and eye damage.
Causes serious eye damage.
Causes damage to organs.
May cause respiratory irritation.
Very toxic to aquatic life.
Toxic to aquatic life with long lasting effects.

2.2. Label elements

GB CLP Regulation

Signal word: Danger

Pictograms:



Hazard statements

H225 Highly flammable liquid and vapour.
H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H370 Causes damage to organs.
H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P281 Use personal protective equipment as required.
P262 Do not get in eyes, on skin, or on clothing.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

Safety Data Sheet

according to UK REACH Regulation

Quinolones Mix; 500 µg/mL in Methanol/NH4OH 95:5 (Mix B)

Revision date:

Product code: CH-MIX005-AMP

Page 2 of 9

P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name	Quantity
	EC No	
	Index No	
	REACH No	
	Classification (GB CLP Regulation)	
67-56-1	methanol	90 - < 95 %
	200-659-6	
	603-001-00-X	
	Flam. Liq. 2, Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, STOT SE 1; H225 H331 H311 H301 H370	
1336-21-6	ammonia ... %	1 - < 5 %
	215-647-6	
	007-001-01-2	
	Skin Corr. 1B, Aquatic Acute 1; H314 H400	
115550-35-1	Marbofloxacin	< 1 %
93106-60-6	Enrofloxacin	< 1 %
70458-96-7	Norfloxacin	< 1 %
82419-36-1	Ofloxacin	< 1 %
110871-86-8	Sparfloxacin	< 1 %
	Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H315 H319 H335	
113617-63-3	Orbifloxacin	< 1 %
389-08-2	Nalidixic acid	< 1 %
	Carc. 2, Acute Tox. 4; H351 H302	
14698-29-4	Oxolinic acid	< 1 %
	Acute Tox. 4; H302	
112398-08-0	Danofloxacin	< 1 %
	Repr. 2, Acute Tox. 4, Eye Irrit. 2, STOT RE 2, Aquatic Chronic 1; H361f H302 H319 H373 H410	
42835-25-6	Flumequine	< 1 %
85721-33-1	Ciprofloxacin	< 1 %
98106-17-3	Difloxacin	< 1 %
	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H302 H315 H319 H335	
98105-99-8	Sarafloxacin	< 1 %
	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H302 H315 H319 H335	

Full text of H and EUH statements: see section 16.

Safety Data Sheet

according to UK REACH Regulation

Quinolones Mix; 500 µg/mL in Methanol/NH4OH 95:5 (Mix B)

Revision date:

Product code: CH-MIX005-AMP

Page 3 of 9

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
67-56-1	200-659-6	methanol	90 - < 95 %
		inhalation: ATE = 3 mg/l (vapours); inhalation: ATE = 0,5 mg/l (dusts or mists); dermal: ATE = 300 mg/kg; oral: ATE = 100 mg/kg STOT SE 1; H370: >= 10 - 100 STOT SE 2; H371: >= 3 - < 10	
1336-21-6	215-647-6	ammonia ... %	1 - < 5 %
		STOT SE 3; H335: >= 5 - 100	
110871-86-8		Sparfloxacin	< 1 %
		oral: LD50 = >5000 mg/kg	
389-08-2		Nalidixic acid	< 1 %
		oral: LD50 = 1160 mg/kg	
14698-29-4		Oxolinic acid	< 1 %
		dermal: LD50 = >2000 mg/kg; oral: LD50 = 525 mg/kg	
112398-08-0		Danofloxacin	< 1 %
		oral: ATE = 500 mg/kg	
85721-33-1		Ciprofloxacin	< 1 %
		oral: LD50 = >2000 mg/kg	
98106-17-3		Difloxacin	< 1 %
		oral: ATE = 500 mg/kg	
98105-99-8		Sarafloxacin	< 1 %
		oral: ATE = 500 mg/kg	

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

After contact with skin

Remove contaminated, saturated clothing immediately. Subsequently wash off with: Water and soap

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water. Get immediate medical advice/attention.
Do NOT induce vomiting. Never give anything by mouth to an unconscious person or a person with cramps.

4.2. Most important symptoms and effects, both acute and delayed

No data available

4.3. Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water spray jet. Foam. Dry extinguishing powder. Carbon dioxide (CO2).

Safety Data Sheet

according to UK REACH Regulation

Quinolones Mix; 500 µg/mL in Methanol/NH₄OH 95:5 (Mix B)

Revision date:

Product code: CH-MIX005-AMP

Page 4 of 9

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Pyrolysis products, toxic. In case of fire and/or explosion do not breathe fumes.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Use personal protection equipment. Do not breathe gas/fumes/vapour/spray.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Other information

Take up dust-free and set down dust-free.

6.4. Reference to other sections

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation should be used if possible.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.

Advice on general occupational hygiene

Use personal protection equipment.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Avoid: UV-radiation/sunlight

Further information on storage conditions

storage temperature: 2-8°C

7.3. Specific end use(s)

none

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
7664-41-7	Ammonia, anhydrous	25	18		TWA (8 h)	WEL
		35	25		STEL (15 min)	WEL
67-56-1	Methanol	200	266		TWA (8 h)	WEL
		250	333		STEL (15 min)	WEL

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation should be used if possible. If local exhaust

Safety Data Sheet

according to UK REACH Regulation

Quinolones Mix; 500 µg/mL in Methanol/NH₄OH 95:5 (Mix B)

Revision date:

Product code: CH-MIX005-AMP

Page 5 of 9

ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

Individual protection measures, such as personal protective equipment

Eye/face protection

Eye glasses with side protection

Hand protection

Wear suitable gloves. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Skin protection

lab coat

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid:
Colour:	colourless
Odour:	Ammonia

Changes in the physical state

Boiling point or initial boiling point and boiling range:	No data available
---	-------------------

Flash point:	No data available
--------------	-------------------

Flammability

Solid/liquid:	No data available
---------------	-------------------

Gas:	No data available
------	-------------------

Explosive properties

No data available

Lower explosion limits:	No data available
-------------------------	-------------------

Upper explosion limits:	No data available
-------------------------	-------------------

Auto-ignition temperature:	No data available
----------------------------	-------------------

Self-ignition temperature

Solid:	No data available
--------	-------------------

Gas:	No data available
------	-------------------

Decomposition temperature:	No data available
----------------------------	-------------------

pH-Value:	No data available
-----------	-------------------

Water solubility:	No data available
-------------------	-------------------

Solubility in other solvents

No data available

Partition coefficient n-octanol/water:	No data available
--	-------------------

Vapour pressure:	No data available
------------------	-------------------

Density:	No data available
----------	-------------------

Relative vapour density:	No data available
--------------------------	-------------------

9.2. Other information

Information with regard to physical hazard classes

Oxidizing properties

No data available

Other safety characteristics

Safety Data Sheet

according to UK REACH Regulation

Quinolones Mix; 500 µg/mL in Methanol/NH₄OH 95:5 (Mix B)

Revision date:

Product code: CH-MIX005-AMP

Page 6 of 9

Evaporation rate:

No data available

Further Information

none

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts with : Oxidising agent, Alkali (lye), Etchant and acids

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Do not expose to temperatures exceeding 50 °C/122 °F.

10.5. Incompatible materials

Oxidising agent, Alkali (lye), Etchant and acids

10.6. Hazardous decomposition products

In case of fire may be liberated: Pyrolysis products, toxic.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

Toxic if swallowed, in contact with skin or if inhaled.

Safety Data Sheet

according to UK REACH Regulation

Quinolones Mix; 500 µg/mL in Methanol/NH4OH 95:5 (Mix B)

Revision date:

Product code: CH-MIX005-AMP

Page 7 of 9

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
67-56-1	methanol				
	oral	ATE 100 mg/kg			
	dermal	ATE 300 mg/kg			
	inhalation vapour	ATE 3 mg/l			
	inhalation dust/mist	ATE 0,5 mg/l			
110871-86-8	Sparfloxacin				
	oral	LD50 >5000 mg/kg	Rat		
389-08-2	Nalidixic acid				
	oral	LD50 1160 mg/kg	Rat		
14698-29-4	Oxolinic acid				
	oral	LD50 525 mg/kg	Rat		
	dermal	LD50 >2000 mg/kg	Rat		
112398-08-0	Danofloxacin				
	oral	ATE 500 mg/kg			
85721-33-1	Ciprofloxacin				
	oral	LD50 >2000 mg/kg	Rat		
98106-17-3	Difloxacin				
	oral	ATE 500 mg/kg			
98105-99-8	Sarafloxacin				
	oral	ATE 500 mg/kg			

Irritation and corrosivity

Causes severe skin burns and eye damage.

Causes serious eye damage.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

Causes damage to organs. (methanol)

May cause respiratory irritation.

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.

Specific effects in experiment on an animal

No data available

Safety Data Sheet

according to UK REACH Regulation

Quinolones Mix; 500 µg/mL in Methanol/NH₄OH 95:5 (Mix B)

Revision date:

Product code: CH-MIX005-AMP

Page 8 of 9

SECTION 12: Ecological information

12.1. Toxicity

No data available

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
1336-21-6	ammonia ... %					
	Acute fish toxicity	LC50 mg/l	0,53	96 h	Oncorhynchus mykiss	
	Fish toxicity	NOEC	1,2 mg/l	61 d	Oncorhynchus gorbuscha	

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
1336-21-6	ammonia ... %	-1,38

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

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

This substance does not meet the PBT/vPvB criteria of 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 data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation.

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

Contaminated packaging

This material and its container must be disposed of as hazardous waste.

SECTION 14: Transport information

Land transport (ADR/RID)

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

Safety Data Sheet

according to UK REACH Regulation

Quinolones Mix; 500 µg/mL in Methanol/NH₄OH 95:5 (Mix B)

Revision date:

Product code: CH-MIX005-AMP

Page 9 of 9

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No data available

14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 40, Entry 69, Entry 75

National regulatory information

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water hazard class (D):

3 - highly hazardous to water

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H301+H311+H331	Toxic if swallowed, in contact with skin or if inhaled.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H361f	Suspected of damaging fertility.
H370	Causes damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Further Information

This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship. The substances are only for R&D. Do not use as a drug, in household or other applications.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)