

Safety Data Sheet

according to UK REACH Regulation

Nitroimidazoles Mix; various concentrations in Acetonitrile (Mix F)

Revision date:

Product code: NM_MIX002-AMP

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

1.1. Product identifier

Nitroimidazoles Mix; various concentrations in Acetonitrile (Mix F)

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.
Harmful if swallowed, in contact with skin or if inhaled.
Causes serious eye irritation.

2.2. Label elements

GB CLP Regulation

Signal word: Danger

Pictograms:



Hazard statements

H225	Highly flammable liquid and vapour.
H302+H312+H332	Harmful if swallowed, in contact with skin or if inhaled.
H319	Causes serious eye irritation.

2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
75-05-8	acetonitrile; cyanomethane			95 - < 100 %
	200-835-2	608-001-00-3		
	Flam. Liq. 2, Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Eye Irrit. 2; H225 H332 H312 H302 H319			
16773-42-5	Ornidazole			< 1 %
	Acute Tox. 4; H302			
936-05-0	HMMNI			< 1 %
14885-29-1	Iprnidazole			< 1 %
	238-957-3			
	Acute Tox. 4; H302			
35175-14-5	Iprnidazole-OH			< 1 %
4812-40-2	Metronidazole-OH			< 1 %
7681-76-7	Ronidazole			< 1 %
	231-675-1			
70028-95-4	Ternidazole hydrochloride			< 1 %
	274-285-7			
	Acute Tox. 4; H302			
42116-76-7	Carnidazole			< 1 %
19387-91-8	Tinidazole			< 1 %
	243-014-4			
	Carc. 2, Muta. 2, Acute Tox. 4, Acute Tox. 4; H351 H341 H332 H312			
227622-73-3	Secnidazole hemihydrate			< 1 %
	Repr. 2; H361d			
6506-37-2	Nimorazole			< 1 %
	229-394-4			
	Acute Tox. 4; H302			
443-48-1	Metronidazole			< 1 %
	Carc. 2, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H351 H315 H319 H335			

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

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Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
75-05-8	200-835-2	acetonitrile; cyanomethane	95 - < 100 %
		inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 988 mg/kg; oral: ATE = 500 mg/kg	
16773-42-5		Ornidazole	< 1 %
		oral: LD50 = 1139 mg/kg	
14885-29-1	238-957-3	Ipronidazole	< 1 %
		oral: LD50 = 640 mg/kg	
7681-76-7	231-675-1	Ronidazole	< 1 %
		oral: LD50 = 3450 mg/kg	
70028-95-4	274-285-7	Ternidazole hydrochloride	< 1 %
		oral: ATE = 500 mg/kg	
19387-91-8	243-014-4	Tinidazole	< 1 %
		inhalation: Data lacking (gases); dermal: Data lacking; oral: LD50 = 2710 mg/kg	
6506-37-2	229-394-4	Nimorazole	< 1 %
		oral: LD50 = 1540 mg/kg	
443-48-1		Metronidazole	< 1 %
		oral: LD50 = 3000 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).

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

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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
75-05-8	Acetonitrile	40	68		TWA (8 h)	WEL
		60	102		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 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

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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:	odourless

Changes in the physical state

Melting point/freezing point:	-45 °C
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
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Upper explosion limits:	No data available
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Auto-ignition temperature:	No data available
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Self-ignition temperature

Solid:	No data available
Gas:	No data available

Decomposition temperature:	No data available
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pH-Value:	No data available
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Water solubility:	No data available
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Solubility in other solvents

No data available

Partition coefficient n-octanol/water:	No data available
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Vapour pressure:	No data available
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Density:	No data available
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Relative vapour density:	No data available
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9.2. Other information

Information with regard to physical hazard classes

Oxidizing properties
No data available

Other safety characteristics

Evaporation rate:	No data available
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Further Information

none

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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

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

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
75-05-8	acetonitrile; cyanomethane				
	oral	ATE 500 mg/kg			
	dermal	LD50 988 mg/kg	Rabbit	IUCLID	
	inhalation vapour	ATE 11 mg/l			
	inhalation dust/mist	ATE 1,5 mg/l			
16773-42-5	Ornidazole				
	oral	LD50 1139 mg/kg	Mouse		
14885-29-1	Iprnidazole				
	oral	LD50 640 mg/kg	Meleagris gallopavo		
7681-76-7	Ronidazole				
	oral	LD50 3450 mg/kg	Rat		
70028-95-4	Ternidazole hydrochloride				
	oral	ATE 500 mg/kg			
19387-91-8	Tinidazole				
	oral	LD50 2710 mg/kg	Rat		
	dermal	Data lacking			
	inhalation	Data lacking			
6506-37-2	Nimorazole				
	oral	LD50 1540 mg/kg	Rat		
443-48-1	Metronidazole				
	oral	LD50 3000 mg/kg	Rat		

Irritation and corrosivity

Causes serious eye irritation.

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

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

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.

Specific effects in experiment on an animal

No data available

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SECTION 12: Ecological information

12.1. Toxicity

No data available

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
75-05-8	acetonitrile; cyanomethane					
	Acute fish toxicity	LC50 mg/l	1640	96 h	Pimephales promelas	IUCLID

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
75-05-8	acetonitrile; cyanomethane	-0,34

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.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

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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 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.
H302	Harmful if swallowed.
H302+H312+H332	Harmful if swallowed, in contact with skin or if inhaled.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H361d	Suspected of damaging the unborn child.

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.)