

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**
**1.1. Product identifier**

Product form : Mixture  
 Product name : MicroVue Factor I EIA Kit  
 Product code : A041

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

Industrial/Professional use spec : For research use only.

**1.2.2. Uses advised against**

Restrictions on use : Restricted to professional users

**1.3. Details of the supplier of the safety data sheet**
**Manufacturer**

Quidel Corporation  
 2005 East State Street, Suite 100  
 45701 Athens - USA  
 T 1.800.874.1517 - F 1.740.592.9820  
[gehs@quidel.com](mailto:gehs@quidel.com) - [quidel.com](http://quidel.com)

**1.4. Emergency telephone number**

Emergency number : 1.866.519.4752


**SECTION 2: Hazards identification**
**2.1. Classification of the substance or mixture**
**Classification according to Regulation (EC) No. 1272/2008 [CLP]**





Components	CLP classification
Specimen Diluent (50 mL)	Skin Sens. 1, H317
20X Wash Solution Concentrate (50 mL)	Skin Sens. 1, H317
Factor I, Positive and Negative Controls (1 mL)	Skin Sens. 1, H317
Stop Solution (12 mL)	Met. Corr. 1, H290 Skin Corr. 1, H314 Eye Dam. 1, H318
TMB Substrate (12 mL)	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 1B, H360 STOT SE 3, H335

**Adverse physicochemical, human health and environmental effects**

Highly flammable liquid and vapour. May be corrosive to metals. May damage fertility or the unborn child. May cause respiratory irritation. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.

**2.2. Label elements**
**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

Components	Pictograms	Signal word	Hazard statements	Precautionary statements
Specimen Diluent (50 mL)		Warning	H317 - May cause an allergic skin reaction.	P280 - Wear gloves, safety glasses, and lab coat. P302+P352 - IF ON SKIN: Wash with plenty of water. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

<b>20X Wash Solution Concentrate (50 mL)</b>		Warning	H317 - May cause an allergic skin reaction.	P280 - Wear gloves, safety glasses, and lab coat. P302+P352 - IF ON SKIN: Wash with plenty of water. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
<b>Factor I, Positive and Negative Controls (1 mL)</b>			H317 - May cause an allergic skin reaction.	P280 - Wear gloves, safety glasses, and lab coat. P302+P352 - IF ON SKIN: Wash with plenty of water. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
<b>Stop Solution (12 mL)</b>		Danger	H290 - May be corrosive to metals. H314 - Causes severe skin burns and eye damage.	P261 - Avoid breathing mist, spray. P280 - Wear gloves, safety glasses, and lab coat. P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P321 - Specific treatment (see supplemental first aid instruction on this label). P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
<b>TMB Substrate (12 mL)</b>		Danger	H225 - Highly flammable liquid and vapour. H315 - Causes skin irritation. H319 - Causes serious eye irritation. H335 - May cause respiratory irritation. H360 - May damage fertility or the unborn child.	P261 - Avoid breathing mist, spray. P264 - Wash hands thoroughly after handling. P280 - Wear gloves, safety glasses, and lab coat. P302+P352 - IF ON SKIN: Wash with plenty of water. P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P332+P313 - If skin irritation occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**2.3. Other hazards**

 Contains no PBT/vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

**SECTION 3: Composition/information on ingredients**
**3.1. Substances**

Not applicable

**3.2. Mixtures**

Name	Chemical name	CAS No EC-No.	%	CLP classification
1. Specimen Diluent (50 mL) 2. 20X Wash Solution Concentrate (50 mL) 3. Factor I, Positive and Negative Controls (1 mL)	<i>Mixture for ProClin 300:</i> 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	55965-84-9 -	0.035	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Stop Solution (12 mL)	hydrochloric acid ... %	7647-01-0 -	1 – 5	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335
TMB Substrate (12 mL)	1-ethylpyrrolidin-2-one	2687-91-4 -	1 – 5	Repr. 1B, H360D
	acetone	67-64-1 -	1 – 10	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
	1-methyl-2-pyrrolidone	872-50-4 -	1 – 10	Repr. 1B, H360D Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315

**Specific concentration limits:**

Name	Product identifier	Specific concentration limits
1-methyl-2-pyrrolidone	(CAS No) 872-50-4 (EC-No.) 212-828-1 (EC Index-No.) 606-021-00-7	( 5 ≤ C < 100) Repr. 1B, H360D ( 10 ≤ C < 100) STOT SE 3, H335
hydrochloric acid ... %	(CAS No) 7647-01-0 (EC-No.) 231-595-7 (EC Index-No.) 017-002-01-X	( 10 ≤ C < 25) Skin Irrit. 2, H315 ( 10 ≤ C < 25) Eye Irrit. 2, H319 ( 10 ≤ C < 100) STOT SE 3, H335 ( 25 ≤ C < 100) Skin Corr. 1B, H314
mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)	(CAS No) 55965-84-9 (EC Index-No.) 613-167-00-5	( 0.0015 ≤ C < 100) Skin Sens. 1, H317 ( 0.06 ≤ C < 0.6) Eye Irrit. 2, H319 ( 0.06 ≤ C < 0.6) Skin Irrit. 2, H315 ( 0.6 ≤ C < 100) Skin Corr. 1B, H314

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

**SECTION 4: First aid measures**
**4.1. Description of first aid measures**

First-aid measures general	: IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact	: Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.

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

Treat symptomatically.

**SECTION 5: Firefighting measures**
**5.1. Extinguishing media**

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
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**5.2. Special hazards arising from the substance or mixture**

Fire hazard	: Highly flammable liquid and vapour.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

**5.3. Advice for firefighters**

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
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**SECTION 6: Accidental release measures**
**6.1. Personal precautions, protective equipment and emergency procedures**
**6.1.1. For non-emergency personnel**

Emergency procedures : No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protective equipment may intervene. Avoid breathing mist, spray.

**6.1.2. For emergency responders**

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

**6.2. Environmental precautions**

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

**6.3. Methods and material for containment and cleaning up**

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

**6.4. Reference to other sections**

For further information refer to section 13.

**SECTION 7: Handling and storage**
**7.1. Precautions for safe handling**

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Do not handle until all safety precautions have been read and understood. Avoid breathing mist, spray. Avoid contact with skin and eyes.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

**7.2. Conditions for safe storage, including any incompatibilities**

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store in corrosive resistant container with a resistant inner liner. Keep only in original container. Store locked up.

Incompatible materials : Metals.

**7.3. Specific end use(s)**

No additional information available

**SECTION 8: Exposure controls/personal protection**
**8.1. Control parameters**

hydrochloric acid ... % (7647-01-0)		
USA - OSHA	Local name	Hydrogen chloride
USA - OSHA	OSHA PEL C	7 mg/m <sup>3</sup>
USA - OSHA	OSHA PEL C [ppm]	5 ppm

acetone (67-64-1)		
EU	IOEL TWA	1210 mg/m <sup>3</sup>
EU	IOEL TWA [ppm]	500 ppm
Belgium	OEL TWA	1210 mg/m <sup>3</sup>
Belgium	OEL TWA [ppm]	500 ppm
Belgium	OEL STEL	2420 mg/m <sup>3</sup>
Belgium	OEL STEL [ppm]	1000 ppm
France	VME (OEL TWA)	1210 mg/m <sup>3</sup>
France	VME (OEL TWA) [ppm]	500 ppm
France	VLE (OEL C/STEL)	2420 mg/m <sup>3</sup>

acetone (67-64-1)		
France	VLE (OEL C/STEL) [ppm]	1000 ppm
Netherlands	TGG-8u (OEL TWA)	1210 mg/m <sup>3</sup>
Netherlands	TGG-8u (OEL TWA) [ppm]	501 ppm
Netherlands	TGG-15min (OEL STEL)	2420 mg/m <sup>3</sup>
Netherlands	TGG-15min (OEL STEL) [ppm]	1002 ppm
United Kingdom	WEL TWA (OEL TWA) [1]	1210 mg/m <sup>3</sup>
United Kingdom	WEL TWA (OEL TWA) [2]	500 ppm
United Kingdom	WEL STEL (OEL STEL)	3620 mg/m <sup>3</sup>
United Kingdom	WEL STEL (OEL STEL) [ppm]	1500 ppm
USA - ACGIH	ACGIH OEL TWA [ppm]	250 ppm
USA - ACGIH	ACGIH OEL STEL [ppm]	500 ppm

1-methyl-2-pyrrolidone (872-50-4)		
EU	IOEL TWA	40 mg/m <sup>3</sup>
EU	IOEL TWA [ppm]	10 ppm
EU	IOEL STEL	80 mg/m <sup>3</sup>
EU	IOEL STEL [ppm]	20 ppm
Belgium	OEL TWA	40 mg/m <sup>3</sup>
Belgium	OEL TWA [ppm]	10 ppm
Belgium	OEL STEL	80 mg/m <sup>3</sup>
Belgium	OEL STEL [ppm]	20 ppm
France	VME (OEL TWA)	40 mg/m <sup>3</sup>
France	VME (OEL TWA) [ppm]	10 ppm
France	VLE (OEL C/STEL)	80 mg/m <sup>3</sup>
France	VLE (OEL C/STEL) [ppm]	20 ppm
Netherlands	TGG-8u (OEL TWA)	40 mg/m <sup>3</sup>
Netherlands	TGG-8u (OEL TWA) [ppm]	9.72 ppm
Netherlands	TGG-15min (OEL STEL)	80 mg/m <sup>3</sup>
Netherlands	TGG-15min (OEL STEL) [ppm]	19.44 ppm
United Kingdom	WEL TWA (OEL TWA) [1]	40 mg/m <sup>3</sup>
United Kingdom	WEL TWA (OEL TWA) [2]	10 ppm
United Kingdom	WEL STEL (OEL STEL)	80 mg/m <sup>3</sup>
United Kingdom	WEL STEL (OEL STEL) [ppm]	20 ppm
USA - ACGIH	BEI	100 mg/l Parameter: 5-Hydroxy-N-methyl-2-pyrrolidone - Medium: urine - Sampling time: End of shift

## 8.2. Exposure controls

### Appropriate engineering controls:

Ensure good ventilation of the work station.

### Materials for protective clothing:

Lab coat

### Hand protection:

Protective gloves

**Eye protection:**

Safety glasses

**Skin and body protection:**

Wear suitable protective clothing

**Respiratory protection:**

[In case of inadequate ventilation] wear respiratory protection.

**Personal protective equipment symbol(s):**

**Environmental exposure controls:**

Avoid release to the environment.

**Other information:**

Do not eat, drink or smoke when using this product.

**SECTION 9: Physical and chemical properties**
**9.1. Information on basic physical and chemical properties**

Physical state	: Liquid
Colour	: No data available
Odour	: No data available
Odour threshold	: No data available
pH	: Stop Solution, pH <1
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

**9.2. Other information**

No additional information available

**SECTION 10: Stability and reactivity**
**10.1. Reactivity**

Highly flammable liquid and vapour.

**10.2. Chemical stability**

Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

No dangerous reactions known under normal conditions of use.

**10.4. Conditions to avoid**

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

**10.5. Incompatible materials**

metals.

**10.6. Hazardous decomposition products**

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**SECTION 11: Toxicological information**
**11.1. Information on toxicological effects**

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

**mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) (55965-84-9)**

LD50 oral rat	53 mg/kg (Rat, Literature study)
LD50 dermal	200 – 1000 mg/kg bodyweight (Literature study)

**1-ethylpyrrolidin-2-one (2687-91-4)**

LD50 oral rat	3200 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral)
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat	> 5.1 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol))

**acetone (67-64-1)**

LD50 oral rat	5800 mg/kg (Equivalent or similar to OECD 401, Rat, Female, Experimental value)
LD50 dermal rabbit	20000 mg/kg (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value)
LC50 Inhalation - Rat	76 mg/l (Other, 4 h, Rat, Female, Experimental value)

**1-methyl-2-pyrrolidone (872-50-4)**

LD50 oral rat	4150 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 5000 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 5.1 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 14 day(s))

Skin corrosion/irritation : Causes skin irritation.  
 Serious eye damage/irritation : Causes serious eye irritation.  
 Respiratory or skin sensitisation : May cause an allergic skin reaction.  
 Germ cell mutagenicity : Not classified  
 Carcinogenicity : Not classified

**hydrochloric acid ... % (7647-01-0)**

IARC group	3 - Not classifiable
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Reproductive toxicity : May damage fertility or the unborn child.  
 STOT-single exposure : May cause respiratory irritation.  
 STOT-repeated exposure : Not classified  
 Aspiration hazard : Not classified

**SECTION 12: Ecological information**
**12.1. Toxicity**

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

**mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) (55965-84-9)**

LC50 - Fish [1]	0.28 mg/l (96 h, Lepomis macrochirus, Literature)
EC50 - Crustacea [1]	0.16 mg/l (48 h, Daphnia magna, Literature)
EC50 72h - Algae [1]	0.018 mg/l (Pseudokirchneriella subcapitata, Literature)

**1-ethylpyrrolidin-2-one (2687-91-4)**

LC50 - Fish [1]	> 465 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Brachydanio rerio, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	> 104 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
EC50 72h - Algae [1]	> 101 mg/l (OECD 201: Alga, Growth Inhibition Test, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Growth rate)

**acetone (67-64-1)**

LC50 - Fish [1]	5540 mg/l (EU Method C.1, 96 h, Salmo gairdneri, Static system, Fresh water, Experimental value)
EC50 96h - Algae [1]	> 7000 mg/l (Selenastrum capricornutum, Static system, Fresh water, Experimental value)

**1-methyl-2-pyrrolidone (872-50-4)**

LC50 - Fish [1]	> 500 mg/l (96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value)
EC50 - Crustacea [1]	1107 mg/l (EPA 660/3 - 75/009, 96 h, Palaemonetes vulgaris, Static system, Salt water, Experimental value)
EC50 - Crustacea [2]	> 1000 mg/l (DIN 38412-11, 24 h, Daphnia magna, Static system, Fresh water, Experimental value)
EC50 72h - Algae [1]	600.5 mg/l (DIN 38412-9, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Growth rate)

**12.2. Persistence and degradability**
**mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) (55965-84-9)**

Biochemical oxygen demand (BOD)	Not applicable.
Chemical oxygen demand (COD)	Not applicable.
ThOD	Not applicable.
BOD (% of ThOD)	Not applicable.

**hydrochloric acid ... % (7647-01-0)**

Persistence and degradability	Biodegradability: not applicable.
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**1-ethylpyrrolidin-2-one (2687-91-4)**

Persistence and degradability	Readily biodegradable in water.
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<b>acetone (67-64-1)</b>	
Persistence and degradability	Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.43 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.92 g O <sub>2</sub> /g substance
ThOD	2.2 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.872 (20 day(s), Literature study)

<b>1-methyl-2-pyrrolidone (872-50-4)</b>	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.07 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.56 g O <sub>2</sub> /g substance
ThOD	1.9 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.56

### 12.3. Bioaccumulative potential

<b>mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) (55965-84-9)</b>	
Bioaccumulative potential	Not established.

<b>hydrochloric acid ... % (7647-01-0)</b>	
Bioaccumulative potential	Does not contain bioaccumulative component(s).

<b>1-ethylpyrrolidin-2-one (2687-91-4)</b>	
Partition coefficient n-octanol/water (Log Pow)	-0.2 (Experimental value, EU Method A.8: Partition Coefficient, 23 °C)
Bioaccumulative potential	Not bioaccumulative.

<b>acetone (67-64-1)</b>	
BCF - Fish [1]	0.69 (Pisces)
BCF - Other aquatic organisms [1]	3 (BCFWIN, Calculated value)
Partition coefficient n-octanol/water (Log Pow)	-0.24 (Test data)
Bioaccumulative potential	Not bioaccumulative.

<b>1-methyl-2-pyrrolidone (872-50-4)</b>	
BCF - Other aquatic organisms [1]	3 (Calculated value)
Bioaccumulative potential	Not bioaccumulative.

### 12.4. Mobility in soil

<b>mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) (55965-84-9)</b>	
Ecology - soil	No (test)data on mobility of the components available.

<b>hydrochloric acid ... % (7647-01-0)</b>	
Ecology - soil	No (test)data on mobility of the components available. May be harmful to plant growth, blooming and fruit formation.

<b>1-ethylpyrrolidin-2-one (2687-91-4)</b>	
Surface tension	0.069 N/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.6 (log Koc, PCKOCWIN v1.66, Calculated value)
Ecology - soil	Low potential for adsorption in soil. Highly mobile in soil.

<b>acetone (67-64-1)</b>	
Surface tension	0.0237 N/m
Ecology - soil	No (test)data on mobility of the substance available.

<b>1-methyl-2-pyrrolidone (872-50-4)</b>	
Surface tension	0.407 N/m
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.32 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil.

### 12.5. Results of PBT and vPvB assessment

<b>Component</b>	
1-methyl-2-pyrrolidone (872-50-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
acetone (67-64-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
1-ethylpyrrolidin-2-one (2687-91-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
hydrochloric acid ... % (7647-01-0)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Flammable vapours may accumulate in the container.
Ecology - waste materials	: Avoid release to the environment.

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN

### 14.1. UN number

UN-No. (ADR)	: Not regulated
UN-No. (IMDG)	: Not regulated
UN-No. (IATA)	: Not regulated
UN-No. (ADN)	: Not regulated

### 14.2. UN proper shipping name

Proper Shipping Name (ADR)	: Not regulated
Proper Shipping Name (IMDG)	: Not regulated
Proper Shipping Name (IATA)	: Not regulated
Proper Shipping Name (ADN)	: Not regulated

### 14.3. Transport hazard class(es)

**ADR**

Transport hazard class(es) (ADR) : Not regulated

**IMDG**

Transport hazard class(es) (IMDG) : Not regulated

**IATA**

Transport hazard class(es) (IATA) : Not regulated

**ADN**

Transport hazard class(es) (ADN) : Not regulated

### 14.4. Packing group

Packing group (ADR) : Not regulated

Packing group (IMDG) : Not regulated

Packing group (IATA) : Not regulated

Packing group (ADN) : Not regulated

### 14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available

### 14.6. Special precautions for user

**Overland transport**

Not regulated

**Transport by sea**

Not regulated

**Air transport**

Not regulated

**Inland waterway transport**

Not regulated

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains a substance on the REACH candidate list: 1-Methyl-2-pyrrolidone (EC 212-828-1, CAS 872-50-4)

Contains no REACH Annex XIV substances

#### 15.1.2. National regulations

**Germany**

Regulatory reference : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1)

 Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG)  
 Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

**Netherlands**

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed

SZW-lijst van reprotoxische stoffen – Ontwikkeling : 1-ethylpyrrolidin-2-one,1-methyl-2-pyrrolidone are listed

**Denmark**

Danish National Regulations

: Young people below the age of 18 years are not allowed to use the product

Pregnant/breastfeeding women working with the product must not be in direct contact with the product

**Switzerland**

Chemicals Ordinance (SR 813.11)

: Group 1

**15.2. Chemical safety assessment**

No chemical safety assessment has been carried out

**SECTION 16: Other information**
**Indication of changes:**

New EU SDS template.

**Abbreviations and acronyms:**

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BLV	Biological limit value
CAS No	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
EC-No.	European Community number
EN	European Standard
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative
WGK	Water Hazard Class

Other information

: Please review product insert prior to using this product.

**Full text of H- and EUH-statements:**

Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3

Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
H225	Highly flammable liquid and vapour.
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H360	May damage fertility or the unborn child.
H360D	May damage the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
Met. Corr. 1	Corrosive to metals, Category 1
Repr. 1B	Reproductive toxicity, Category 1B
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*