

**SECTION 1: Kit identification****1.1 Kit identifier**

Product name : Kit Stainer MCDh  
 Product code : 360200

**1.2 Details of the supplier of the Kit safety information sheet**

RAL DIAGNOSTICS  
 Site Montesquieu  
 33650 MARTILLAC - FRANCE  
 T 33 05 57 96 04 04 - F 33 05 57 96 04 05  
[commercial@cellavision.com](mailto:commercial@cellavision.com) - [www.cellavision.com](http://www.cellavision.com)

**SECTION 2: General information**

Restrictions on use : For professional use only  
 In vitro diagnostic medical device.

General description : Staining kit for blood smears.

This product is a Kit which consists of several independently packaged components One or more of these components include a substance or mixture that is subject to classification according to Regulation (EC) No. 1272/2008 [CLP] A SDS for each of these components is included. Please do not separate any component SDS from this cover page

**SECTION 3: Kit contents**

Name	General description	Weight or Volume	Quantity	Unit	Classification according to Regulation (EC) No. 1272/2008 [CLP]
MCDh 2			2	pcs (pieces)	Skin Sens. 1, H317 Aquatic Chronic 3, H412
MCDh 1			2	pcs (pieces)	Flam. Liq. 2, H225
MCDh 4, Concentrate			1	pcs (pieces)	Flam. Liq. 3, H226 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H336 Aquatic Chronic 2, H411
MCDh 3			1	pcs (pieces)	Not classified

**SECTION 4: General advice**

No data available

**SECTION 5: Safe handling advice**

General measures : Do not handle until all safety precautions have been read and understood.  
 Environmental precautions : Avoid release to the environment  
 This material and its container must be disposed of in a safe way, and as per local legislation  
 Storage conditions : Store in original container  
 Keep container tightly closed  
 Store in dry, well-ventilated area

# Kit Stainer MCDh

## Kit Safety Information Sheet (SIS)

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### SECTION 6: First aid measures

First-aid measures after eye contact	: Rinse eyes with water as a precaution
First-aid measures after ingestion	: If swallowed, seek medical advice immediately and show this container or label Rinse mouth out with water
First-aid measures after skin contact	: Rinse with plenty of water
First-aid measures general	: If you feel unwell, seek medical advice (show the label where possible)

### SECTION 7: Fire fighting measures

Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection Exercise caution when fighting any chemical fire
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### SECTION 8: Transport information

Refer to the section 14 of the kit products' SDSs

### SECTION 9: Other information

No data available

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

Product form : Mixture  
Product name : MCDh 3  
Product code : 313560

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

Main use category : For professional use only  
Use of the substance/mixture : In vitro diagnostic medical device.

**1.2.2. Uses advised against**

No additional information available

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

RAL DIAGNOSTICS  
Site Montesquieu  
33650 MARTILLAC  
FRANCE  
T 33 05 57 96 04 04 - F 33 05 57 96 04 05  
[commercial@cellavision.com](mailto:commercial@cellavision.com) - [www.cellavision.com](http://www.cellavision.com)

**1.4. Emergency telephone number**

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
Malta	Medicines & Poisons Info Office	Mater Dei Hospital Msida MSD 2090 Msida	+356 2545 6508	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	Only for healthcare professionals

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

Not classified

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

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

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

No labelling applicable

**2.3. Other hazards**

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

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## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of REACH Annex II

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.  
First-aid measures after skin contact : Wash skin with plenty of water.  
First-aid measures after eye contact : Rinse eyes with water as a precaution.  
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

No additional information available

#### 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.

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

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.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

##### 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.

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

Methods for cleaning up : Take up liquid spill into absorbent material.  
Other information : Dispose of materials or solid residues at an authorized site.

# MCDh 3

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### **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.

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**

Storage conditions

: Store in a well-ventilated place.

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

No additional information available

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

### **8.1. Control parameters**

#### **8.1.1 National occupational exposure and biological limit values**

No additional information available

#### **8.1.2. Recommended monitoring procedures**

No additional information available

#### **8.1.3. Air contaminants formed**

No additional information available

#### **8.1.4. DNEL and PNEC**

No additional information available

#### **8.1.5. Control banding**

No additional information available

### **8.2. Exposure controls**

#### **8.2.1. Appropriate engineering controls**

**Appropriate engineering controls:**

Ensure good ventilation of the work station.

#### **8.2.2. Personal protection equipment**

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



##### **8.2.2.1. Eye and face protection**

**Eye protection:**

Safety glasses

##### **8.2.2.2. Skin protection**

**Skin and body protection:**

Wear suitable protective clothing

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## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### Hand protection:

Protective gloves

### 8.2.2.3. Respiratory protection

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Colour	: Blue.
Appearance	: clear.
Odour	: odourless.
Odour threshold	: Not available
Melting point	: -4 °C
Freezing point	: -4 °C
Boiling point	: 99 °C
Flammability	: Not applicable
Explosive limits	: Not available
Lower explosion limit	:
Upper explosion limit	:
Flash point	:
Auto-ignition temperature	: > 500 °C
Decomposition temperature	: Not available
pH	: 7.25 – 7.35
Viscosity, kinematic	: Not available
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: 23.2 mbar
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: 1.002 – 1.012
Relative vapour density at 20°C	: 0.01
Relative density of saturated gas/air mixture	: 0.99
Particle characteristics	: Not applicable

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

No additional information available

# MCDh 3

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### SECTION 10: Stability and reactivity

#### **10.1. Reactivity**

The product is non-reactive under normal conditions of use, storage and transport.

#### **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**

None under recommended storage and handling conditions (see section 7).

#### **10.5. Incompatible materials**

No additional information available

#### **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 hazard classes as defined in Regulation (EC) No 1272/2008**

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified pH: 7.25 – 7.35
Serious eye damage/irritation	: Not classified pH: 7.25 – 7.35
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

#### **11.2. Information on other hazards**

##### **11.2.1. Endocrine disrupting properties**

Adverse health effects caused by endocrine disrupting properties : The substance/mixture has no endocrine disrupting properties.

##### **11.2.2. Other information**

No additional information available

### 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

# MCDh 3

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### **12.2. Persistence and degradability**

No additional information available

### **12.3. Bioaccumulative potential**

No additional information available

### **12.4. Mobility in soil**

No additional information available

### **12.5. Results of PBT and vPvB assessment**

No additional information available

### **12.6. Endocrine disrupting properties**

Adverse effects on the environment caused by endocrine disrupting properties : The substance/mixture has no endocrine disrupting properties.

### **12.7. Other adverse effects**

Other adverse effects : Not release to the environment.

## **SECTION 13: Disposal considerations**

### **13.1. Waste treatment methods**

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions. Dispose in a safe manner in accordance with local/national regulations.

## **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number or ID number</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.2. UN proper shipping name</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

### **14.6. Special precautions for user**

#### **Overland transport**

Not applicable

#### **Transport by sea**

Not applicable

#### **Air transport**

Not applicable

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## Safety Data Sheet

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### Inland waterway transport

Not applicable

### Rail transport

Not applicable

### 14.7. Maritime transport in bulk according to IMO instruments

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

##### REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

##### REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

##### REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

##### PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

##### POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

##### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

##### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

##### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
	Revision date	Modified	
16	Abbreviations and acronyms	Added	

### 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

# MCDh 3

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>Abbreviations and acronyms:</b>	
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

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

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.

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

Product form : Mixture  
 Product name : MCDh 2  
 Product code : 313570

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

Main use category : For professional use only  
 Use of the substance/mixture : In vitro diagnostic medical device.

**1.2.2. Uses advised against**

No additional information available

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

RAL DIAGNOSTICS  
 Site Montesquieu  
 33650 MARTILLAC  
 FRANCE  
 T 33 05 57 96 04 04 - F 33 05 57 96 04 05  
[commercial@cellavision.com](mailto:commercial@cellavision.com) - [www.cellavision.com](http://www.cellavision.com)

**1.4. Emergency telephone number**

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
Malta	Medicines & Poisons Info Office	Mater Dei Hospital Msida MSD 2090 Msida	+356 2545 6508	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	Only for healthcare professionals

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

Skin sensitisation, Category 1 H317  
 Hazardous to the aquatic environment – Chronic Hazard, Category H412  
 3

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

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

May cause an allergic skin reaction.

# MCDh 2

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) :

Warning

Contains :

A 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)

Hazard statements (CLP) :

H317 - May cause an allergic skin reaction.  
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) :

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.  
P280 - Wear protective clothing, protective gloves, eye protection.  
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.  
P362+P364 - Take off contaminated clothing and wash it before reuse.

Labelling according to: exemption for packages of a capacity of 125ml or less

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) :

Warning

Hazardous ingredients :

A 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)

Hazard statements (CLP) :

H317 - May cause an allergic skin reaction.  
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) :

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.  
P280 - Wear protective clothing, protective gloves, eye protection.  
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.  
P362+P364 - Take off contaminated clothing and wash it before reuse.

### 2.3. Other hazards

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

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
A 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	$\leq 0.005$	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Skin Corr. 1, H314 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)

# MCDh 2

## Safety Data Sheet

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Specific concentration limits:		
Name	Product identifier	Specific concentration limits
A 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. 1A, H317 ( 0.06 ≤C < 0.6) Eye Irrit. 2, H319 ( 0.06 ≤C < 0.6) Skin Irrit. 2, H315 ( 0.6 ≤C ≤ 100) Eye Dam. 1, H318 ( 0.6 ≤C ≤ 100) Skin Corr. 1C, 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 after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
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 skin contact : May cause an allergic skin reaction.

#### 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.

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

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.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/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.

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

Methods for cleaning up : Take up liquid spill into absorbent material.  
Other information : Dispose of materials or solid residues at an authorized site.

# MCDh 2

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### **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. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.

Hygiene measures

: Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. 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**

Storage conditions

: Store in a well-ventilated place.

Storage temperature

: 15 – 25 °C

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

No additional information available

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

### **8.1. Control parameters**

#### **8.1.1 National occupational exposure and biological limit values**

No additional information available

#### **8.1.2. Recommended monitoring procedures**

No additional information available

#### **8.1.3. Air contaminants formed**

No additional information available

#### **8.1.4. DNEL and PNEC**

No additional information available

#### **8.1.5. Control banding**

No additional information available

### **8.2. Exposure controls**

#### **8.2.1. Appropriate engineering controls**

**Appropriate engineering controls:**

Ensure good ventilation of the work station.

#### **8.2.2. Personal protection equipment**

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



##### **8.2.2.1. Eye and face protection**

**Eye protection:**

Safety glasses

##### **8.2.2.2. Skin protection**

**Skin and body protection:**

Wear suitable protective clothing

# MCDh 2

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### Hand protection:

Protective gloves

### 8.2.2.3. Respiratory protection

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Colour	: Colourless.
Appearance	: clear.
Odour	: Not available
Odour threshold	: Not available
Melting point	: -1 °C
Freezing point	: -1 °C
Boiling point	: 100
Flammability	: Not applicable
Explosive limits	: Not available
Lower explosion limit	:
Upper explosion limit	:
Flash point	:
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: 6.97 – 7.03
Viscosity, kinematic	: Not available
Solubility	: Water: 100 %
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: 23.3 mbar
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: 0.994 – 1.004 at 20 °C
Relative vapour density at 20°C	: 0.01
Relative density of saturated gas/air mixture	: 0.99
Particle characteristics	: Not applicable

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

No additional information available

# MCDh 2

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### 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

None under recommended storage and handling conditions (see section 7).

#### 10.5. Incompatible materials

No additional information available

#### 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 hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

#### A 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	457 mg/kg bodyweight
LD50 dermal rat	660 mg/kg bodyweight
LC50 Inhalation - Rat	1.23 mg/m <sup>3</sup>
ATE CLP (oral)	100 mg/kg bodyweight
ATE CLP (dermal)	300 mg/kg bodyweight
ATE CLP (gases)	700 ppmv/4h
ATE CLP (vapours)	3 mg/l/4h
ATE CLP (dust,mist)	0.5 mg/l/4h

Skin corrosion/irritation : Not classified  
pH: 6.97 – 7.03

Serious eye damage/irritation : Not classified  
pH: 6.97 – 7.03

Respiratory or skin sensitisation : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

#### A 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)

NOAEL (oral, rat, 90 days)	22 mg/kg bodyweight/day
NOAEL (dermal, rat/rabbit, 90 days)	100 mg/kg bodyweight/day

Aspiration hazard : Not classified

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### **11.2. Information on other hazards**

#### **11.2.1. Endocrine disrupting properties**

Adverse health effects caused by endocrine disrupting properties : The substance/mixture has no endocrine disrupting properties.

#### **11.2.2. Other information**

No additional information available

## **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) : Harmful to aquatic life with long lasting effects.

<b>A 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>	
LC50 - Fish [1]	190 µg/l
LC50 - Fish [2]	300 µg/l
EC50 - Crustacea [1]	160 µg/l
EC50 - Crustacea [2]	282 µg/l
EC50 72h - Algae [1]	37100 mg/l
EC50 72h - Algae [2]	3500 mg/l
NOEC chronic fish	20000 mg/l

### **12.2. Persistence and degradability**

No additional information available

### **12.3. Bioaccumulative potential**

No additional information available

### **12.4. Mobility in soil**

No additional information available

### **12.5. Results of PBT and vPvB assessment**

No additional information available

### **12.6. Endocrine disrupting properties**

Adverse effects on the environment caused by endocrine disrupting properties : The substance/mixture has no endocrine disrupting properties.

### **12.7. Other adverse effects**

Other adverse effects : Not release to the environment.

## **SECTION 13: Disposal considerations**

### **13.1. Waste treatment methods**

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions. Dispose in a safe manner in accordance with local/national regulations.

## **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / ADN / RID

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ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number or ID number</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.2. UN proper shipping name</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.3. Transport hazard class(es)</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.4. Packing group</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.5. Environmental hazards</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
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

#### **Rail transport**

Not regulated

### **14.7. Maritime transport in bulk according to IMO instruments**

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**

##### **REACH Annex XVII (Restriction List)**

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

##### **REACH Annex XIV (Authorisation List)**

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

##### **REACH Candidate List (SVHC)**

Contains no substance(s) listed on the REACH Candidate List

##### **PIC Regulation (Prior Informed Consent)**

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

##### **POP Regulation (Persistent Organic Pollutants)**

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

##### **Ozone Regulation (1005/2009)**

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

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### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.1.2. National regulations

No additional information available

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

### SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
	Supersedes	Modified	
	Revision date	Modified	
2.1	Adverse physicochemical, human health and environmental effects	Added	
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Added	
2.2	Precautionary statements (CLP)	Added	
2.2	Signal word (CLP)	Added	
2.2	Hazard pictograms (CLP)	Added	
2.2	Hazard statements (CLP)	Added	
7.2	Storage temperature	Added	
15.2	Chemical safety assessment	Added	
16	Abbreviations and acronyms	Added	

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

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<b>Abbreviations and acronyms:</b>	
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

<b>Full text of H- and EUH-statements:</b>	
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
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.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Skin Corr. 1	Skin corrosion/irritation, Category 1
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1A	Skin sensitisation, category 1A

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

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.

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

Product form : Mixture  
 Product name : MCDh 1  
 Product code : 313590

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

Main use category : For professional use only  
 Use of the substance/mixture : In vitro diagnostic medical device.

**1.2.2. Uses advised against**

No additional information available

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

RAL DIAGNOSTICS  
 Site Montesquieu  
 33650 MARTILLAC  
 FRANCE  
 T 33 05 57 96 04 04 - F 33 05 57 96 04 05  
[commercial@cellavision.com](mailto:commercial@cellavision.com) - [www.cellavision.com](http://www.cellavision.com)

**1.4. Emergency telephone number**

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
Malta	Medicines & Poisons Info Office	Mater Dei Hospital Msida MSD 2090 Msida	+356 2545 6508	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	Only for healthcare professionals

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

Flammable liquids, Category 2 H225

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

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

Highly flammable liquid and vapour.

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

Hazard pictograms (CLP) :



GHS02

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Signal word (CLP) : Danger  
Hazard statements (CLP) : H225 - Highly flammable liquid and vapour.  
Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Labelling according to: exemption for packages of a capacity of 125ml or less

Hazard pictograms (CLP) :



GHS02

Signal word (CLP) : Danger

### 2.3. Other hazards

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

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Absolute ethanol substance with national workplace exposure limit(s) (IE, GB)	CAS-No.: 64-17-5 EC-No.: 200-578-6 EC Index-No.: 603-002-00-5 REACH-no: 01-2119457610-43	50 - 80	Flam. Liq. 2, H225
Ethylene glycol substance with national workplace exposure limit(s) (IE, MT, GB); substance with a Community workplace exposure limit	CAS-No.: 107-21-1 EC-No.: 203-473-3 EC Index-No.: 603-027-00-1 REACH-no: 01-2119456816-28	0,1 - 1	Acute Tox. 4 (Oral), H302

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 after inhalation : Remove person to fresh air and keep comfortable for breathing.  
First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing.  
First-aid measures after eye contact : Rinse eyes with water as a precaution.  
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

No additional information available

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

Treat symptomatically.

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### SECTION 5: Firefighting measures

#### **5.1. Extinguishing media**

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

#### **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.

### SECTION 6: Accidental release measures

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

##### **6.1.1. For non-emergency personnel**

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking.

##### **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.

#### **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 : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Ensure good ventilation of the work station.

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**

Storage conditions : Store in a well-ventilated place. Keep container tightly closed.

Storage temperature : 15 – 25 °C

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

No additional information available

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### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### 8.1.1 National occupational exposure and biological limit values

<b>Ethylene glycol (107-21-1)</b>	
<b>EU - Indicative Occupational Exposure Limit (IOEL)</b>	
Local name	Ethylene glycol
IOEL TWA	52 mg/m <sup>3</sup>
IOEL STEL	104 mg/m <sup>3</sup>
IOEL STEL [ppm]	40 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
<b>Ireland - Occupational Exposure Limits</b>	
Local name	Ethane-1,2-diol [Ethylene glycol]
OEL TWA [1]	10 mg/m <sup>3</sup> particulate 52 mg/m <sup>3</sup> vapour
OEL TWA [2]	20 ppm vapour
OEL STEL	104 mg/m <sup>3</sup> vapour
OEL STEL [ppm]	40 ppm vapour
Remark	Sk (Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body), IOELV (Indicative Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2021
<b>Malta - Occupational Exposure Limits</b>	
Local name	Ethylene glycol
OEL TWA	52 mg/m <sup>3</sup>
OEL TWA [ppm]	20 ppm
OEL STEL	104 mg/m <sup>3</sup>
OEL STEL [ppm]	40 ppm
Remark	Skin # Ġilda
Regulatory reference	S.L.424.24 - Chemical Agents at Work Regulations (L.N.356 of 2021)
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Ethane-1,2-diol
WEL TWA (OEL TWA) [1]	10 mg/m <sup>3</sup> particulate 52 mg/m <sup>3</sup> vapour
WEL TWA (OEL TWA) [2]	20 ppm vapour
WEL STEL (OEL STEL)	104 mg/m <sup>3</sup> vapour
WEL STEL (OEL STEL) [ppm]	40 ppm vapour
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
<b>Absolute ethanol (64-17-5)</b>	
<b>Ireland - Occupational Exposure Limits</b>	
Local name	Ethanol [Ethyl alcohol]

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<b>Absolute ethanol (64-17-5)</b>	
OEL STEL [ppm]	1000 ppm
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Ethanol
WEL TWA (OEL TWA) [1]	1920 mg/m <sup>3</sup>
WEL TWA (OEL TWA) [2]	1000 ppm

### **8.1.2. Recommended monitoring procedures**

No additional information available

### **8.1.3. Air contaminants formed**

No additional information available

### **8.1.4. DNEL and PNEC**

No additional information available

### **8.1.5. Control banding**

No additional information available

## **8.2. Exposure controls**

### **8.2.1. Appropriate engineering controls**

#### **Appropriate engineering controls:**

Ensure good ventilation of the work station.

### **8.2.2. Personal protection equipment**

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



#### **8.2.2.1. Eye and face protection**

##### **Eye protection:**

Safety glasses

#### **8.2.2.2. Skin protection**

##### **Skin and body protection:**

Wear suitable protective clothing

##### **Hand protection:**

Protective gloves

#### **8.2.2.3. Respiratory protection**

##### **Respiratory protection:**

In case of insufficient ventilation, wear suitable respiratory equipment

#### **8.2.2.4. Thermal hazards**

No additional information available

### **8.2.3. Environmental exposure controls**

#### **Environmental exposure controls:**

Avoid release to the environment.

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

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

Physical state : Liquid

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Colour	: dark blue.
Appearance	: clear.
Odour	: Not available
Odour threshold	: Not available
Melting point	: < -90 °C
Freezing point	: < -90
Boiling point	: 60 °C
Flammability	: Not applicable
Explosive limits	: Not available
Lower explosion limit	: 3 vol %
Upper explosion limit	: 66 vol %
Flash point	: 21.63 °C
Auto-ignition temperature	: 297 °C
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: Not available
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: 44 mbar
Vapour pressure at 50°C	: Not available
Density	: ≥ 0.91
Relative density	: 0.91 – 0.92
Relative vapour density at 20°C	: 0.07
Relative density of saturated gas/air mixture	: 1.03
Particle characteristics	: Not applicable

### **9.2. Other information**

#### **9.2.1. Information with regard to physical hazard classes**

No additional information available

#### **9.2.2. Other safety characteristics**

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**

No additional information available

### **10.6. Hazardous decomposition products**

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

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### SECTION 11: Toxicological information

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

<b>Ethylene glycol (107-21-1)</b>	
LD50 oral rat	7712 mg/kg Source: ECHA
LD50 dermal rat	> 3500 mg/kg mouse
LC50 Inhalation - Rat	> 2.5 mg/l
ATE CLP (oral)	500 mg/kg bodyweight

<b>Absolute ethanol (64-17-5)</b>	
LD50 oral rat	15010 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 14450 - 15560
LD50 oral	8300 mg/kg bodyweight Animal: mouse
LD50 dermal rat	> 2000 mg/kg
LC50 Inhalation - Rat	> 20 mg/l
ATE CLP (oral)	8300 mg/kg bodyweight

Skin corrosion/irritation : Not classified

<b>Ethylene glycol (107-21-1)</b>	
pH	6 – 7.5 Source: GESTIS

Serious eye damage/irritation : Not classified

<b>Ethylene glycol (107-21-1)</b>	
pH	6 – 7.5 Source: GESTIS

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

<b>Absolute ethanol (64-17-5)</b>	
IARC group	1 - Carcinogenic to humans

<b>Ethylene glycol (107-21-1)</b>	
NOAEL (chronic, oral, animal/male, 2 years)	1500 mg/kg bodyweight Animal: mouse, Animal sex: male, Remarks on results: other:Effect type: carcinogenicity (migrated information)

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

<b>Ethylene glycol (107-21-1)</b>	
NOAEL (oral, rat, 90 days)	150 mg/kg bodyweight/day rat
NOAEL (dermal, rat/rabbit, 90 days)	2200 mg/kg bodyweight/day Dog

<b>Absolute ethanol (64-17-5)</b>	
NOAEL (subchronic, oral, animal/male, 90 days)	< 9700 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents)
NOAEL (subchronic, oral, animal/female, 90 days)	> 9400 mg/kg bodyweight Animal: mouse, Animal sex: female, Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents)

Aspiration hazard : Not classified

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<b>Ethylene glycol (107-21-1)</b>	
Viscosity, kinematic	18867.925 mm <sup>2</sup> /s at 40 °C

### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : The substance/mixture has no endocrine disrupting properties.

#### 11.2.2. Other information

No additional information available

## 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

<b>Ethylene glycol (107-21-1)</b>	
LC50 - Fish [1]	72860 mg/l Source: ECHA
EC50 - Crustacea [1]	13900 – 57600 mg/l Source: ECHA
EC50 96h - Algae [1]	6500 – 13000 mg/l Source: ECHA
EC50 96h - Algae [2]	6500 – 13000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	≥ 1000 mg/l Test organisms (species): Americamysis bahia (previous name: Mysidopsis bahia) Duration: '23 d'
NOEC chronic fish	15380 mg/l Pimephales promelas
NOEC chronic crustacea	8590 mg/l Cerio daphnia

<b>Absolute ethanol (64-17-5)</b>	
LC50 - Fish [1]	14.2 g/l Test organisms (species): Pimephales promelas
EC50 72h - Algae [1]	1900 – 1970 mg/l (marine water)
EC50 96h - Algae [1]	275 mg/l (freshwater)
ErC50 algae	275 mg/l Source: ECHA
NOEC (chronic)	9.6 mg/l Test organisms (species): Daphnia magna Duration: '9 d'
NOEC chronic fish	250 mg/l

### 12.2. Persistence and degradability

<b>Absolute ethanol (64-17-5)</b>	
Persistence and degradability	Readily biodegradable.

### 12.3. Bioaccumulative potential

<b>Ethylene glycol (107-21-1)</b>	
Partition coefficient n-octanol/water (Log Pow)	-1.36
Partition coefficient n-octanol/water (Log Kow)	≈ 1.93

<b>Absolute ethanol (64-17-5)</b>	
Partition coefficient n-octanol/water (Log Pow)	-0.32 Source: ICSC

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<b>Absolute ethanol (64-17-5)</b>	
Bioaccumulative potential	No bioaccumulation.

### 12.4. Mobility in soil

<b>Ethylene glycol (107-21-1)</b>	
Mobility in soil	0.2 Source: HSDB
Ecology - soil	Soluble in water.

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : The substance/mixture has no endocrine disrupting properties.

### 12.7. Other adverse effects

Other adverse effects : Not release to the environment.

## SECTION 13: Disposal considerations






### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions. Dispose in a safe manner in accordance with local/national regulations.

Additional information : Flammable vapours may accumulate in the container.

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number or ID number</b>				
UN 1170	UN 1170	UN 1170	UN 1170	UN 1170
<b>14.2. UN proper shipping name</b>				
ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	Ethanol solution	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
<b>Transport document description</b>				
UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II, (D/E)	UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II	UN 1170 Ethanol solution, 3, II	UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II	UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II
<b>14.3. Transport hazard class(es)</b>				
3	3	3	3	3
				
<b>14.4. Packing group</b>				
II	II	II	II	II

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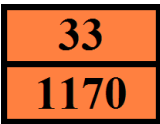
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ADR	IMDG	IATA	ADN	RID
<b>14.5. Environmental hazards</b>				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

### **14.6. Special precautions for user**

#### **Overland transport**

Classification code (ADR)	: F1
Special provisions (ADR)	: 144, 601
Limited quantities (ADR)	: 1I
Excepted quantities (ADR)	: E2
Packing instructions (ADR)	: P001, IBC02, R001
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T4
Portable tank and bulk container special provisions (ADR)	: TP1
Tank code (ADR)	: LGBF
Vehicle for tank carriage	: FL
Transport category (ADR)	: 2
Special provisions for carriage - Operation (ADR)	: S2, S20
Hazard identification number (Kemler No.)	: 33
Orange plates	: 
Tunnel restriction code (ADR)	: D/E
EAC code	: •2YE

#### **Transport by sea**

Special provisions (IMDG)	: 144
Limited quantities (IMDG)	: 1 L
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-D
Stowage category (IMDG)	: A
Properties and observations (IMDG)	: Colourless, volatile liquids. Pure ETHANOL: flashpoint 13°C c.c. Explosive limits: 3.3% to 19% Miscible with water.
MFAG-No	: 127

#### **Air transport**

PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y341
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 353
PCA max net quantity (IATA)	: 5L

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CAO packing instructions (IATA)	: 364
CAO max net quantity (IATA)	: 60L
Special provisions (IATA)	: A3, A58, A180
ERG code (IATA)	: 3L

### Inland waterway transport

Classification code (ADN)	: F1
Special provisions (ADN)	: 144, 601
Limited quantities (ADN)	: 1 L
Excepted quantities (ADN)	: E2
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01
Number of blue cones/lights (ADN)	: 1

### Rail transport

Classification code (RID)	: F1
Special provisions (RID)	: 144, 601
Limited quantities (RID)	: 1L
Excepted quantities (RID)	: E2
Packing instructions (RID)	: P001, IBC02, R001
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T4
Portable tank and bulk container special provisions (RID)	: TP1
Tank codes for RID tanks (RID)	: LGBF
Transport category (RID)	: 2
Colis express (express parcels) (RID)	: CE7
Hazard identification number (RID)	: 33

### **14.7. Maritime transport in bulk according to IMO instruments**

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**

##### **REACH Annex XVII (Restriction List)**

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

##### **REACH Annex XIV (Authorisation List)**

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

##### **REACH Candidate List (SVHC)**

Contains no substance(s) listed on the REACH Candidate List

##### **PIC Regulation (Prior Informed Consent)**

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

##### **POP Regulation (Persistent Organic Pollutants)**

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

##### **Ozone Regulation (1005/2009)**

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

##### **Explosives Precursors Regulation (2019/1148)**

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

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### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.1.2. National regulations

No additional information available

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

### SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
	Revision date	Modified	
2.2	Signal word (CLP)	Modified	
2.2	Precautionary statements (CLP)	Modified	
2.2	Hazard statements (CLP)	Modified	
3	Composition/information on ingredients	Modified	
7.2	Storage temperature	Added	
9.1	Boiling point	Added	
14.1	UN-No. (ADN)	Added	
14.1	UN-No. (IMDG)	Added	
14.1	UN-No. (IATA)	Added	
14.1	UN-No. (ADR)	Added	
15.2	Chemical safety assessment	Added	
16	Abbreviations and acronyms	Added	

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
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose

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<b>Abbreviations and acronyms:</b>	
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

<b>Full text of H- and EUH-statements:</b>	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Flam. Liq. 2	Flammable liquids, Category 2
H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

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.

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

Product form : Mixture  
 Product name : MCDh 4, Concentrate  
 Product code : 313610

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

Main use category : For professional use only  
 Use of the substance/mixture : In vitro diagnostic medical device.

**1.2.2. Uses advised against**

No additional information available

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

RAL DIAGNOSTICS  
 Site Montesquieu  
 33650 MARTILLAC  
 FRANCE  
 T 33 05 57 96 04 04 - F 33 05 57 96 04 05  
[commercial@cellavision.com](mailto:commercial@cellavision.com) - [www.cellavision.com](http://www.cellavision.com)

**1.4. Emergency telephone number**

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
Malta	Medicines & Poisons Info Office	Mater Dei Hospital Msida MSD 2090 Msida	+356 2545 6508	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	Only for healthcare professionals

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

Flammable liquids, Category 3 H226  
 Serious eye damage/eye irritation, Category 2 H319  
 Skin sensitisation, Category 1 H317  
 Specific target organ toxicity – Single exposure, Category 3, Narcosis H336  
 Hazardous to the aquatic environment – Chronic Hazard, Category H411 2

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

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

Flammable liquid and vapour. May cause drowsiness or dizziness. May cause an allergic skin reaction. Causes serious eye irritation.

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### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02

GHS07

GHS09

Signal word (CLP) :

Warning

Contains :

Isopropyl alcohol; A 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)

Hazard statements (CLP) :

H226 - Flammable liquid and vapour.  
H317 - May cause an allergic skin reaction.  
H319 - Causes serious eye irritation.  
H336 - May cause drowsiness or dizziness.  
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.  
P280 - Wear protective gloves, protective clothing, eye protection.  
P312 - Call doctor, a POISON CENTER if you feel unwell.  
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.  
P391 - Collect spillage.

### 2.3. Other hazards

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

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Isopropyl alcohol	CAS-No.: 67-63-0 EC-No.: 200-661-7 EC Index-No.: 603-117-00-0 REACH-no: 01-2119457558-25	$\geq 40$	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
A 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	$\leq 0.05$	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Skin Corr. 1, H314 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)

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Specific concentration limits:		
Name	Product identifier	Specific concentration limits
A 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. 1A, H317 ( 0.06 ≤C < 0.6) Eye Irrit. 2, H319 ( 0.06 ≤C < 0.6) Skin Irrit. 2, H315 ( 0.6 ≤C ≤ 100) Eye Dam. 1, H318 ( 0.6 ≤C ≤ 100) Skin Corr. 1C, 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	: Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing. 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	: May cause drowsiness or dizziness.
Symptoms/effects after skin contact	: 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.

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

Fire hazard	: 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.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

##### 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.

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### **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 : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. 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**

Storage conditions : Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Storage temperature : 15 – 25 °C

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

No additional information available

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

### **8.1. Control parameters**

#### **8.1.1 National occupational exposure and biological limit values**

No additional information available

#### **8.1.2. Recommended monitoring procedures**

No additional information available

#### **8.1.3. Air contaminants formed**

No additional information available

#### **8.1.4. DNEL and PNEC**

No additional information available

#### **8.1.5. Control banding**

No additional information available

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### **8.2. Exposure controls**

#### **8.2.1. Appropriate engineering controls**

##### **Appropriate engineering controls:**

Ensure good ventilation of the work station.

#### **8.2.2. Personal protection equipment**

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



##### **8.2.2.1. Eye and face protection**

###### **Eye protection:**

Safety glasses

##### **8.2.2.2. Skin protection**

###### **Skin and body protection:**

Wear suitable protective clothing

###### **Hand protection:**

Protective gloves

##### **8.2.2.3. Respiratory protection**

###### **Respiratory protection:**

In case of insufficient ventilation, wear suitable respiratory equipment

##### **8.2.2.4. Thermal hazards**

No additional information available

### **8.2.3. Environmental exposure controls**

##### **Environmental exposure controls:**

Avoid release to the environment.

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

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

Physical state	: Liquid
Colour	: Colourless.
Appearance	: clear.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: -30 °C
Freezing point	: -30 °C
Boiling point	: 74 °C
Flammability	: Not applicable
Explosive limits	: Not available
Lower explosion limit	: 12.9 vol %
Upper explosion limit	: 35.5 vol %
Flash point	: 23.77 °C
Auto-ignition temperature	: 460 °C
Decomposition temperature	: Not available
pH	: 7.66 – 7.7
Viscosity, kinematic	: Not available
Solubility	: Not available

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Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: 45 mbar
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: 0.927 – 0.931
Relative vapour density at 20°C	: 0.09
Relative density of saturated gas/air mixture	: 1.05
Particle characteristics	: Not applicable

### **9.2. Other information**

#### **9.2.1. Information with regard to physical hazard classes**

No additional information available

#### **9.2.2. Other safety characteristics**

No additional information available

## **SECTION 10: Stability and reactivity**

### **10.1. Reactivity**

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**

No additional information available

### **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 hazard classes as defined in Regulation (EC) No 1272/2008**

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

<b>Isopropyl alcohol (67-63-0)</b>	
LD50 oral rat	5840 mg/kg
LD50 dermal rabbit	13900 mg/kg
LC50 Inhalation - Rat	25 mg/l 6 Hours
ATE CLP (oral)	5840 mg/kg bodyweight
<b>A 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>	
LD50 oral rat	457 mg/kg bodyweight
LD50 dermal rat	660 mg/kg bodyweight
LC50 Inhalation - Rat	1.23 mg/m <sup>3</sup>

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<b>A 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>	
ATE CLP (oral)	100 mg/kg bodyweight
ATE CLP (dermal)	300 mg/kg bodyweight
ATE CLP (gases)	700 ppmv/4h
ATE CLP (vapours)	3 mg/l/4h
ATE CLP (dust,mist)	0.5 mg/l/4h

Skin corrosion/irritation	: Not classified pH: 7.66 – 7.7
Serious eye damage/irritation	: Causes serious eye irritation. pH: 7.66 – 7.7
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause drowsiness or dizziness.

<b>Isopropyl alcohol (67-63-0)</b>	
STOT-single exposure	May cause drowsiness or dizziness.
STOT-repeated exposure	: Not classified

<b>A 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>	
NOAEL (oral, rat, 90 days)	22 mg/kg bodyweight/day
NOAEL (dermal, rat/rabbit, 90 days)	100 mg/kg bodyweight/day

Aspiration hazard	: Not classified
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### **11.2. Information on other hazards**

#### **11.2.1. Endocrine disrupting properties**

Adverse health effects caused by endocrine disrupting properties	: The substance/mixture has no endocrine disrupting properties.
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#### **11.2.2. Other information**

No additional information available

## **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)	: Toxic to aquatic life with long lasting effects.

<b>Isopropyl alcohol (67-63-0)</b>	
EC50 - Crustacea [1]	≥ 100 mg/l
EC50 72h - Algae [1]	> 1000 mg/l

<b>A 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>	
LC50 - Fish [1]	190 µg/l
LC50 - Fish [2]	300 µg/l

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<b>A 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>	
EC50 - Crustacea [1]	160 µg/l
EC50 - Crustacea [2]	282 µg/l
EC50 72h - Algae [1]	37100 mg/l
EC50 72h - Algae [2]	3500 mg/l
NOEC chronic fish	20000 mg/l

### 12.2. Persistence and degradability

<b>Isopropyl alcohol (67-63-0)</b>	
Persistence and degradability	Readily biodegradable.
Biodegradation	100 % (96h)

### 12.3. Bioaccumulative potential

<b>Isopropyl alcohol (67-63-0)</b>	
Bioaccumulative potential	Not bioaccumulate.

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : The substance/mixture has no endocrine disrupting properties.

### 12.7. Other adverse effects

Other adverse effects : Not release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions. Dispose in a safe manner in accordance with local/national regulations.

Additional information : Flammable vapours may accumulate in the container.

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number or ID number</b>				
UN 1219	UN 1219	UN 1219	UN 1219	UN 1219
<b>14.2. UN proper shipping name</b>				
ISOPROPANOL (ISOPROPYL ALCOHOL)	ISOPROPANOL (ISOPROPYL ALCOHOL)	Isopropanol	ISOPROPANOL (ISOPROPYL ALCOHOL)	ISOPROPANOL (ISOPROPYL ALCOHOL)

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ADR	IMDG	IATA	ADN	RID
<b>Transport document description</b>				
UN 1219 ISOPROPANOL (ISOPROPYL ALCOHOL), 3, II, (D/E), ENVIRONMENTALLY HAZARDOUS	UN 1219 ISOPROPANOL (ISOPROPYL ALCOHOL), 3, II, MARINE POLLUTANT/ENVIRON MENTALLY HAZARDOUS (12°C c.c.)	UN 1219 Isopropanol, 3, II, ENVIRONMENTALLY HAZARDOUS	UN 1219 ISOPROPANOL (ISOPROPYL ALCOHOL), 3, II, ENVIRONMENTALLY HAZARDOUS	UN 1219 ISOPROPANOL (ISOPROPYL ALCOHOL), 3, II, ENVIRONMENTALLY HAZARDOUS
<b>14.3. Transport hazard class(es)</b>				
3	3	3	3	3
<b>14.4. Packing group</b>				
II	II	II	II	II
<b>14.5. Environmental hazards</b>				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available				

### 14.6. Special precautions for user

#### Overland transport

Classification code (ADR)	: F1
Special provisions (ADR)	: 601
Limited quantities (ADR)	: 1I
Excepted quantities (ADR)	: E2
Packing instructions (ADR)	: P001, IBC02, R001
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T4
Portable tank and bulk container special provisions (ADR)	: TP1
Tank code (ADR)	: LGBF
Vehicle for tank carriage	: FL
Transport category (ADR)	: 2
Special provisions for carriage - Operation (ADR)	: S2, S20
Hazard identification number (Kemler No.)	: 33
Orange plates	:
Tunnel restriction code (ADR)	: D/E
EAC code	: •2YE

#### Transport by sea

Limited quantities (IMDG)	: 1 L
Excepted quantities (IMDG)	: E2

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Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-D
Stowage category (IMDG)	: B
Flash point (IMDG)	: 12°C c.c.
Properties and observations (IMDG)	: Colourless, mobile liquid. Flashpoint: 12°C c.c. Explosive limits: 2% to 12% Miscible with water.
MFAG-No	: 128

### Air transport

PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y341
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 353
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 364
CAO max net quantity (IATA)	: 60L
Special provisions (IATA)	: A180
ERG code (IATA)	: 3L

### Inland waterway transport

Classification code (ADN)	: F1
Special provisions (ADN)	: 601
Limited quantities (ADN)	: 1 L
Excepted quantities (ADN)	: E2
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01
Number of blue cones/lights (ADN)	: 1

### Rail transport

Classification code (RID)	: F1
Special provisions (RID)	: 601
Limited quantities (RID)	: 1L
Excepted quantities (RID)	: E2
Packing instructions (RID)	: P001, IBC02, R001
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T4
Portable tank and bulk container special provisions (RID)	: TP1
Tank codes for RID tanks (RID)	: LGBF
Transport category (RID)	: 2
Colis express (express parcels) (RID)	: CE7
Hazard identification number (RID)	: 33

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

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### SECTION 15: Regulatory information

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

##### **15.1.1. EU-Regulations**

###### **REACH Annex XVII (Restriction List)**

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

###### **REACH Annex XIV (Authorisation List)**

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

###### **REACH Candidate List (SVHC)**

Contains no substance(s) listed on the REACH Candidate List

###### **PIC Regulation (Prior Informed Consent)**

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

###### **POP Regulation (Persistent Organic Pollutants)**

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

###### **Ozone Regulation (1005/2009)**

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

###### **Explosives Precursors Regulation (2019/1148)**

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

###### **Drug Precursors Regulation (273/2004)**

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

##### **15.1.2. National regulations**

No additional information available

#### **15.2. Chemical safety assessment**

No chemical safety assessment has been carried out

### SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
	Revision date	Modified	
	Supersedes	Modified	
14.1	UN-No. (IMDG)	Modified	
14.1	UN-No. (ADN)	Modified	
14.1	UN-No. (IATA)	Modified	
14.1	UN-No. (ADR)	Modified	

#### 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

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<b>Abbreviations and acronyms:</b>	
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

<b>Full text of H- and EUH-statements:</b>	
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.
H226	Flammable liquid and vapour.
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.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.

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<b>Full text of H- and EUH-statements:</b>	
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
Skin Corr. 1	Skin corrosion/irritation, Category 1
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1A	Skin sensitisation, category 1A
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

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.