



## SAFETY DATA SHEET MONENSIN SOLUTION (1000X)

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

#### 1.1. Product identifier

Product name MONENSIN SOLUTION (1000X)

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

Identified uses For research use only.

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

Supplier Web: [www.bio-rad-antibodies.com](http://www.bio-rad-antibodies.com)  
Bio-Rad  
Endeavour House  
Langford Business Park  
Kidlington  
Oxford  
OX5 1GE  
Tel. +44 (0)1865 852700  
[antibody\\_safetydatasheets@bio-rad.com](mailto:antibody_safetydatasheets@bio-rad.com)

Contact person Technical Services Manager

#### 1.4. Emergency telephone number

Emergency telephone +1 7037415970 (CHEMTREC)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (EC 1272/2008)

Physical hazards Flam. Liq. 2 - H225

Health hazards Not Classified

Environmental hazards Not Classified

#### 2.2. Label elements

##### Pictogram



Signal word Danger

Hazard statements H225 Highly flammable liquid and vapour.

## MONENSIN SOLUTION (1000X)

<b>Precautionary statements</b>	<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P233 Keep container tightly closed.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.</p> <p>P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.</p> <p>P403+P235 Store in a well-ventilated place. Keep cool.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
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### 2.3. Other hazards

#### SECTION 3: Composition/information on ingredients

##### 3.2. Mixtures

<b>ETHANOL</b>	<b>60-100%</b>
CAS number: 64-17-5	EC number: 200-578-6
<b>Classification</b>	
Flam. Liq. 2 - H225	
<b>MONENSIN SODIUM SALT</b>	<b>0.14%</b>
CAS number: 22373-78-0	EC number: 244-941-7
<b>Classification</b>	
Acute Tox. 2 - H300	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

<b>Composition comments</b>	No other ingredients, including those with occupational exposure limits, present above the level of disclosure
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#### SECTION 4: First aid measures

##### 4.1. Description of first aid measures

<b>General information</b>	Effects may be delayed. Keep affected person under observation. Keep affected person away from heat, sparks and flames.
<b>Inhalation</b>	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. Get medical attention.
<b>Ingestion</b>	Remove affected person from source of contamination. Rinse mouth thoroughly with water. DO NOT induce vomiting. Get medical attention immediately.
<b>Skin contact</b>	Remove affected person from source of contamination. Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Get medical attention if any discomfort continues.
<b>Eye contact</b>	Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention if any discomfort continues.

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

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

#### SECTION 5: Firefighting measures

##### 5.1. Extinguishing media

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**Suitable extinguishing media** Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Do not use water jet as an extinguisher, as this will spread the fire.

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

**Specific hazards** Flammable liquid and vapour.

### 5.3. Advice for firefighters

**Protective actions during firefighting** Ventilate closed spaces before entering them. Move containers from fire area if it can be done without risk. Do not scatter spilled material with more water than needed to fight the fire. Control run-off water by containing and keeping it out of sewers and watercourses.

**Special protective equipment for firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

## SECTION 6: Accidental release measures

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

**Personal precautions** Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. If ventilation is inadequate, suitable respiratory protection must be worn. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate.

### 6.2. Environmental precautions

**Environmental precautions** Avoid discharge into drains or watercourses or onto the ground.

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

**Methods for cleaning up** Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Stop leak if safe to do so. Provide adequate ventilation. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Absorb in vermiculite, dry sand or earth and place into containers.

### 6.4. Reference to other sections

**Reference to other sections** For waste disposal, see section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Restricted to professional users. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid spilling, skin and eye contact.

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

**Storage precautions** Do not store near heat sources or expose to high temperatures. Keep away from heat, sparks and open flame.

### 7.3. Specific end use(s)

## SECTION 8: Exposure Controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

##### ETHANOL

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1920 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit

### 8.2. Exposure controls

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### Protective equipment



### Appropriate engineering controls

Provide adequate ventilation.

### Personal protection

Keep separate from food, feedstuffs, fertilisers and other sensitive material.

### Eye/face protection

Wear chemical splash goggles.

### Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible.

### Other skin and body protection

Wear protective clothing.

### Hygiene measures

Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Provide eyewash station.

### Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible.

### Environmental exposure controls

Keep container tightly sealed when not in use.

## SECTION 9: Physical and Chemical Properties

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

Appearance	Liquid.
Colour	Colourless.
Odour	Alcoholic.
Odour threshold	Not available.
pH	Not available.
Melting point	Not available.
Initial boiling point and range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Evaporation factor	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	Not available.
Other flammability	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	Not available.
Bulk density	Not available.
Solubility(ies)	Soluble in water.

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<b>Partition coefficient</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition Temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Explosive properties</b>	Not available.
<b>Explosive under the influence of a flame</b>	Not considered to be explosive.

### 9.2. Other information

#### SECTION 10: Stability and reactivity

##### 10.1. Reactivity

**Reactivity** No information available

##### 10.2. Chemical stability

**Stability** Stable under the prescribed storage conditions.

##### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** No data available.

##### 10.4. Conditions to avoid

**Conditions to avoid** Keep away from heat, sparks and open flame. Avoid heat, flames and other sources of ignition.

##### 10.5. Incompatible materials

**Materials to avoid** Strong oxidising agents. Acids. Strong bases.

##### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Carbon dioxide (CO<sub>2</sub>). Sodium oxides

#### SECTION 11: Toxicological information

##### 11.1. Information on toxicological effects

###### Acute toxicity - oral

**ATE oral (mg/kg)** 20,714.29

###### Skin corrosion/irritation

**Skin corrosion/irritation** Conclusive data but not sufficient for classification.

###### Serious eye damage/irritation

**Serious eye damage/irritation** Conclusive data but not sufficient for classification.

###### Skin sensitisation

**Skin sensitisation** Conclusive data but not sufficient for classification.

###### Germ cell mutagenicity

**Genotoxicity - in vitro** Conclusive data but not sufficient for classification.

###### Carcinogenicity

**Carcinogenicity** Data lacking.

###### Reproductive toxicity

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**Reproductive toxicity - fertility** Data lacking.

### Specific target organ toxicity - single exposure

**STOT - single exposure** Conclusive data but not sufficient for classification. Data lacking.

### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** Conclusive data but not sufficient for classification. Data lacking.

### Aspiration hazard

**Aspiration hazard** No data available.

**Skin contact** May cause irritation.

**Eye contact** May irritate eyes.

**Route of exposure** Ingestion Inhalation Skin and/or eye contact

### Toxicological information on ingredients.

#### ETHANOL

##### Acute toxicity - oral

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 8,300.0

**Species** Human

**ATE oral (mg/kg)** 8,300.0

##### Carcinogenicity

**IARC carcinogenicity** IARC Group 1 Carcinogenic to humans.

#### MONENSIN SODIUM SALT

##### Acute toxicity - oral

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 29.0

**Species** Rat

**ATE oral (mg/kg)** 29.0

## SECTION 12: Ecological Information

### 12.1. Toxicity

**Toxicity** No data available.

### 12.2. Persistence and degradability

**Persistence and degradability** no data available

### 12.3. Bioaccumulative potential

**Partition coefficient** Not available.

### Ecological information on ingredients.

#### ETHANOL

**Partition coefficient** log Kow: ~ 0.35

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### 12.4. Mobility in soil

**Mobility** The product is soluble in water.

### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** No information available

### 12.6. Other adverse effects

**Other adverse effects** Not known.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**General information** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

## SECTION 14: Transport information

**General** As supplied, this product is consigned under the Excepted Quantities provisions.

**Road transport notes** As supplied, this product is consigned under the Excepted Quantities provisions.

**Rail transport notes** As supplied, this product is consigned under the Excepted Quantities provisions.

**Sea transport notes** As supplied, this product is consigned under the Excepted Quantities provisions.

**Air transport notes** As supplied, this product is consigned under the Excepted Quantities provisions.

### 14.1. UN number

**UN No. (ADR/RID)** 1170

**UN No. (IMDG)** 1170

**UN No. (ICAO)** 1170

**UN No. (ADN)** 1170

### 14.2. UN proper shipping name

**Proper shipping name (ADR/RID)** ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

**Proper shipping name (IMDG)** ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

**Proper shipping name (ICAO)** ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

**Proper shipping name (ADN)** ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

### 14.3. Transport hazard class(es)

**ADR/RID class** 3

**ADR/RID classification code** F1

**ADR/RID label** 3

**IMDG class** 3

**ICAO class/division** 3

**ADN class** 3

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### Transport labels



#### 14.4. Packing group

ADR/RID packing group	II
IMDG packing group	II
ADN packing group	II
ICAO packing group	II

#### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

#### 14.6. Special precautions for user

EmS	F-E, S-D
ADR transport category	2
Emergency Action Code	•2YE
Hazard Identification Number (ADR/RID)	33
Tunnel restriction code	(D/E)

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

### SECTION 15: Regulatory information

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

<b>EU legislation</b>	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
<b>Guidance</b>	Workplace Exposure Limits EH40. Approved Classification and Labelling Guide (Sixth edition) L131. Safety Data Sheets for Substances and Preparations.

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

### SECTION 16: Other information

<b>General information</b>	Only trained personnel should use this material.
<b>Revision date</b>	25/09/2018
<b>Revision</b>	1
<b>Supersedes date</b>	17/07/2017
<b>SDS number</b>	20381
<b>Hazard statements in full</b>	H225 Highly flammable liquid and vapour. H300 Fatal if swallowed.



## MONENSIN SOLUTION (1000X)

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.