

Reviewed on 09/22/2010

# **1 Identification**

#### · Product identifier

Trade name: Formic acid 0.1% in Water

• Article number: 2324

• **Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.

• Application of the substance / the preparation Chemical for research, development, manufacturing and analysis

Details of the supplier of the safety data sheet

Manufacturer/Supplier: Biosolve B.V. Leenderweg 78, 5555 CE Valkenswaard, the Netherlands. Tel: +31-(0)40-2071300 Fax:+31-(0)40-2048537 Email: info@biosolve-chemicals.com

Biosolve Chimie 20 Rue Roger Husson, 57260 Dieuze, France Tel: +33 3 878 675 80/81/82/83/84/85 Email: info@biosolvechimie.com

Bio-Lab Ltd. POB 34038, Jerusalem 91340, Israel Tel: + 972 -2- 584 1111 Fax: + 972 -2- 584 1110 Email: info@biolab-chemicals.com

Information department: Product safety department
Emergency telephone number: During normal opening times: +972 2 584 1111

## 2 Hazard(s) identification

Classification of the substance or mixture

The product is not classified according to the Globally Harmonized System (GHS).

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.

- · Information concerning particular hazards for human and environment:
- *The product does not have to be labeled due to the calculation procedure of international guidelines. Classification system:*

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· Label elements

· Labelling according to EU guidelines:

*Observe the general safety regulations when handling chemicals. The product is not subject to identification regulations according to directives on hazardous materials.* 

- · Classification system:
- · NFPA ratings (scale 0 4)

 $\begin{array}{c} \textbf{Health} = 0\\ Fire = 0\\ Reactivity = 0 \end{array}$ 

#### HMIS-ratings (scale 0 - 4)



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### Safety Data Sheet acc. to OSHA HCS

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- Other hazards
- · Results of PBT and vPvB assessment
- *PBT:* Not applicable.
- **vPvB:** Not applicable.

#### **3** Composition/information on ingredients

· Chemical characterization: Substances

- · CAS No. Description
- 7732-18-5 water, distilled, conductivity or of similar purity
- Identification number(s)
- **EC number:** 231-791-2
- · Chemical characterization: Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components: Void

#### 4 First-aid measures

- · Description of first aid measures
- General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

### **5** Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents:
- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- · Protective equipment: No special measures required.

#### **6** Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions: Dilute with plenty of water.
- Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- · Reference to other sections
- No dangerous substances are released.
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### 7 Handling and storage

- **Precautions for safe handling** No special measures required.
- · Information about protection against explosions and fires: No special measures required.

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- Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: None.
- Specific end use(s) No further relevant information available.

#### 8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- Components with limit values that require monitoring at the workplace:
- The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:
- The usual precautionary measures for handling chemicals should be followed.
- Breathing equipment: Not required.
- Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

• Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection: Goggles recommended during refilling.

Information on basic physical and General Information	chemical properties	
Appearance:	Fluid	
Form: Color:	r iuia Colorless	
Odor:	Odorless	
Odour threshold:	Not determined.	
pH-value:	Not determined.	
Change in condition		
Melting point/Melting range:	0 °C (32 °F)	
Boiling point/Boiling range:	100 °C (212 °F)	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not applicable.	

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Ignition temperature:		
Decomposition temperature:	Not determined.	
Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure at 20 °C (68 °F):	23 hPa (17 mm Hg)	
Density at 20 °C (68 °F):	1.00017 g/cm <sup>3</sup> (8.346 lbs/gal)	
Relative density	Not determined.	
Vapour density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Fully miscible.	
Partition coefficient (n-octanol/wate	r): Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Solvent content:		
Organic solvents:	0.0 %	
Water:	99.9 %	
VOC content:	0.1 %	
Other information	No further relevant information available.	

# **10 Stability and reactivity**

- · Reactivity
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.
- Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

### **11** Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

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- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

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#### · NTP (National Toxicology Program)

None of the ingredients is listed.

# **12 Ecological information**

· Toxicity

- Aquatic toxicity: No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- · Bioaccumulative potential No further relevant information available.
- *Mobility in soil* No further relevant information available.
- Additional ecological information:
- · General notes: Generally not hazardous for water
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · **vPvB:** Not applicable.
- · Other adverse effects No further relevant information available.

### **13 Disposal considerations**

- · Waste treatment methods
- **Recommendation:** Smaller quantities can be disposed of with household waste.
- Uncleaned packagings:
- **Recommendation:** Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

## **14 Transport information**

UN-Number		
DOT, ADR, ADN, IMDG, IATA	Void	
UN proper shipping name		
DOT, ADR, ADN, IMDG, IATA	Void	
Transport hazard class(es)		
DOT, ADR, ADN, IMDG, IATA		
Class	Void	
Packing group		
DOT, ĂDR, ĪMDG, IATA	Void	
Environmental hazards:		
Marine pollutant:	No	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex.	II of	
MARPOL73/78 and the IBC Code	Not applicable.	
UN "Model Regulation":	_	

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Safety, health and environmental regu Sara	lations/legislation specific for the substance or mixture
Section 355 (extremely hazardous subs	stances):
None of the ingredients is listed.	
Section 313 (Specific toxic chemical lis	stings):
64-18-6 formic acid	
TSCA (Toxic Substances Control Act):	;
All ingredients are listed.	
Proposition 65	
Chemicals known to cause cancer:	
None of the ingredients is listed.	
Chemicals known to cause reproductiv	ve toxicity for females:
None of the ingredients is listed.	
Chemicals known to cause reproductiv	e toxicity for males:
None of the ingredients is listed.	
Chemicals known to cause development	ntal toxicity:
None of the ingredients is listed.	
Carcinogenic categories	
EPA (Environmental Protection Agend	cy)
None of the ingredients is listed.	
TLV (Threshold Limit Value establish	ed by ACGIH)
None of the ingredients is listed.	
NIOSH-Ca (National Institute for Occ	upational Safety and Health)
None of the ingredients is listed.	
OSHA-Ca (Occupational Safety & Hea	alth Administration)
None of the ingredients is listed.	

*Observe the general safety regulations when handling chemicals.* 

The product is not subject to identification regulations according to directives on hazardous materials.

Chemical safety assessment: A Chemical Safety Assessment has been carried out.

### **16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing MSDS: Product safety department

• Contact: Product safety department

Abbreviations and acronyms:
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organization
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transport association
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)



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HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) (Contd. of page 6)

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