

SAFETY DATA SHEET

Methanol in Water - Acidified

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

1.1. Product identifier

Trade name or designation of the mixture Methanol in Water - Acidified

Product application

This SDS provides health and safety information for any acidified methanol component of the following vials or kits.

GE Analytical Instruments part number	Product name
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STD 74059	-
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GE Analytical Instruments kit number

STD 74409, 74513, 74515, 74613, 74615, 90022, 90025

Date of first issue 03/02/2012

Version number 2.1

Revision date 29/05/2016

Supersedes date 04/11/2014

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

Identified uses Reference Standard

Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

GE Analytical Instruments Inc

6060 Spine Road

Boulder, CO 80301

T 303-444-2009

e-mail : emea.productstewardship@ge.com

GE Water & Process Technologies Hungary Kft.

2800 Tatabánya, Vigadó utca 2011 hrsz.

Hungary

Tel: +36 34 512-520

e-mail : oro.ehs@ge.com

1.4. Emergency telephone number

1-800-535-5053 INFOTRAC (North America)

Outside of N.A., call collect: 1-352-323-3500

GE (800) 877-1940

National Poisons Information Centre

NHS Direct on 0845 46 47

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 as amended

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: Methanol, Phosphoric acid, Water

Hazard pictograms None.

Signal word None.

Hazard statements The product does not need to be labelled in accordance with EC directives or respective national laws.

Precautionary statements

Prevention Not available.

Response Not available.

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Storage	Not available.
Disposal	Not available.
Supplemental label information	None.
2.3. Other hazards	None known.

SECTION 3: Composition/information on ingredients

Mixtures

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Water	> 99,99	7732-18-5 231-791-2	-	-	
Classification:	-				
Phosphoric acid	< 0,01	7664-38-2 231-633-2	01-2119485924-24	015-011-00-6	#
Classification:	Met. Corr. 1;H290, Skin Corr. 1B;H314				B
Methanol	< 0,00014	67-56-1 200-659-6	01-2119433307-44	603-001-00-X	#
Classification:	Flam. Liq. 2;H225, Acute Tox. 3;H301, Acute Tox. 3;H311, Acute Tox. 3;H331, STOT SE 1;H370				

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move to fresh air.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.

4.2. Most important symptoms and effects, both acute and delayed Not available.

4.3. Indication of any immediate medical attention and special treatment needed Not available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	This product does not represent a fire hazard since it contains a high amount of water.
Unsuitable extinguishing media	Not available.

5.2. Special hazards arising from the substance or mixture Oxides of phosphorus evolved in fire.

5.3. Advice for firefighters

Special protective equipment for firefighters	Self contained breathing apparatus. (CEN : EN 137)
Special fire fighting procedures	Use standard firefighting procedures and consider the hazards of other involved materials.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Protective clothing

For emergency responders Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions Prevent from entering sewers or the immediate environment.

6.3. Methods and material for containment and cleaning up Ventilate area, use specified protective equipment.
 Contain and absorb on absorbent material (e.g. sand).
 Place in waste disposal container.
 Flush area with water.
 Wet area may be slippery.
 Spread sand/grit.

6.4. Reference to other sections Please refer also to section no. 8 'Exposure controls' for further information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling Normal chemical handling.

7.2. Conditions for safe storage, including any incompatibilities No special requirements.

7.3. Specific end use(s) Only for professional and industrial users

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
Methanol (CAS 67-56-1)	STEL	333 mg/m ³
		250 ppm
	TWA	266 mg/m ³
Phosphoric acid (CAS 7664-38-2)		200 ppm
	STEL	2 mg/m ³
	TWA	1 mg/m ³

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU

Components	Type	Value
Methanol (CAS 67-56-1)	TWA	260 mg/m ³
		200 ppm
	STEL	2 mg/m ³
Phosphoric acid (CAS 7664-38-2)		1 mg/m ³
	TWA	1 mg/m ³

Biological limit values No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures Not available.

Derived no-effect level (DNEL)

Components	Type	Route	Value	Form
Methanol (CAS 67-56-1)	Workers	Dermal	40 mg/kg/day	Long term - Systemic effects
		Dermal	40 mg/kg/day	Short Term - Systemic Effects
		Inhalation	260 mg/m ³	Long Term - Local Effects
		Inhalation	260 mg/m ³	Long term - Systemic effects
		Inhalation	260 mg/m ³	Short Term - Local Effects
		Inhalation	260 mg/m ³	Short Term - Systemic Effects

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Components	Type	Route	Value	Form
Phosphoric acid (CAS 7664-38-2)	Workers	Inhalation	2,92 mg/m ³	Long Term - Local Effects
		Inhalation	1 mg/m ³	Long term - Systemic effects

Predicted no effect concentrations (PNECs)

Components	Type	Route	Value	Form
Methanol (CAS 67-56-1)	Aqua (freshwater)	Not applicable	154 mg/l	
	Aqua (marine water)	Not applicable	15,4 mg/l	
	Sediment (freshwater)	Not applicable	570,4 mg/kg	
	Soil	Not applicable	23,5 mg/kg	
	STP	Not applicable	100 mg/l	

Exposure guidelines

UK EH40 WEL: Skin designation

Methanol (CAS 67-56-1) Can be absorbed through the skin.

8.2. Exposure controls

Appropriate engineering controls Adequate ventilation to maintain air contaminants below exposure limits.

Individual protection measures, such as personal protective equipment

Eye/face protection Safety goggles.

Skin protection

- **Hand protection** Protective gloves (Plastic, impervious) (Protection against unintentional short-term contact)

- **Other** Handle in accordance with good industrial hygiene and safety procedures.

Respiratory protection Ensure good ventilation.

Thermal hazards Not available.

Environmental exposure controls Prevent from entering in public sewers or the immediate environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Colour Colorless

Physical state Liquid

Odour None

Odour threshold Not available.

pH (concentrated product) 3

Melting point/freezing point Not available.

Initial boiling point and boiling range 100 °C

Flash point > 100 °C P-M(CC)

Evaporation rate 1 (Water = 1)

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Vapour pressure 18 mm Hg

Vapor pressure temp. 21 °C

Vapour density < 1 (Air = 1)

Relative density 1

Relative density temperature 21 °C

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Solubility

Solubility (water)	100 %
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not available.
Viscosity	Not applicable.
Viscosity temperature	21 °C
Explosive properties	Not available.
Oxidising properties	Not available.

9.2. Other information

Percent volatile	0 (Estimated)
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SECTION 10: Stability and reactivity

10.1. Reactivity	Not available.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	Not applicable.
10.4. Conditions to avoid	No special requirement.
10.5. Incompatible materials	Avoid contact with strong bases. Avoid contact with strong oxidisers.
10.6. Hazardous decomposition products	Oxides of phosphorus evolved in fire.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Product	Test results
Methanol in Water - Acidified (Mixture)	Acute Dermal LD50 Rabbit: > 5000 mg/kg (Calculated according to GHS additivity formula) Acute Oral LD50 Rat: > 5000 mg/kg (Calculated according to GHS additivity formula)
Components	Test results
Methanol (67-56-1)	Acute Dermal LD50 Rabbit: 15800 mg/kg Acute Inhalation LC50 Rat: 85 mg/l 4 hour Acute Oral LD50 Rat: 5628 mg/kg
Phosphoric acid (7664-38-2)	Acute Dermal LD50 Rabbit: 2740 mg/kg
Acute toxicity	Not classified.
Skin corrosion/irritation	Not classified.
Serious eye damage/irritation	Direct contact with eyes may cause temporary irritation.
Respiratory or skin sensitisation	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Specific target organ toxicity - single exposure	Not classified.
Carcinogenicity	Not classified.
Germ cell mutagenicity	Not classified.
Reproductive toxicity	Not classified.

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Information on likely routes of exposure

Ingestion	May cause irritation of the gastrointestinal tract.
Inhalation	Prolonged or excessive inhalation may cause respiratory tract irritation.
Skin contact	May be irritating to the skin.
Eye contact	Direct contact with eyes may cause temporary irritation.
Symptoms	Not available.
Aspiration hazard	Not classified.
Mixture versus substance information	None known.
Other information	Not available.

SECTION 12: Ecological information

12.1. Toxicity	No toxicity data noted for the ingredient(s).
12.2. Persistence and degradability	No data available
12.3. Bioaccumulative potential	Not available.
Partition coefficient n-octanol/water (log Kow)	
Methanol	-0,77
Bioconcentration factor (BCF)	Not available.
12.4. Mobility in soil	Not available.
12.5. Results of PBT and vPvB assessment	Not a PBT or vPvB substance or mixture.
12.6. Other adverse effects	Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Contaminated packaging	According to Controlled Waste Regulations. EWC (European Waste Code) recommendation : 15 01 02 15 Waste packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified. 15 01 Packaging (including separately collected municipal packaging waste). 15 01 02 Plastic packaging. Depending on the origin and state of the waste, other EWC numbers may be applicable too.
Disposal methods/information	According to Controlled Waste Regulations. EWC (European Waste Code) recommendation : 16 03 04 16 Wastes not otherwise specified in the list. 16 03 Off-specification batches and unused products. 16 03 04 Inorganic wastes Depending on the origin and state of the waste, other EWC numbers may be applicable too.

SECTION 14: Transport information

ADR	Not regulated as dangerous goods.
RID	Not regulated as dangerous goods.
ADN	Not regulated as dangerous goods.
IATA	Not regulated as dangerous goods.



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IMDG

Not regulated as dangerous goods.

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 143/2011 Annex XIV Substances Subject to Authorisation

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Methanol (CAS 67-56-1) 40

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work

Not listed.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding

Not regulated.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances

Methanol (CAS 67-56-1)

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Methanol (CAS 67-56-1)

Phosphoric acid (CAS 7664-38-2)

Directive 94/33/EC on the protection of young people at work

Methanol (CAS 67-56-1)

Phosphoric acid (CAS 7664-38-2)

National regulations Not available.

15.2. Chemical safety assessment Not available.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes

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Country(s) or region	Inventory name	On inventory (yes/no)*
Europe	European List of Notified Chemical Substances (ELINCS)	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

SECTION 16: Other information

List of abbreviations

COD: Chemical Oxygen Demand
EC-No: European Commission Number
IATA: International Air Transport Association
CAS: Chemical Abstract Service.
CLP: Classification, Labeling and Packaging REGULATION (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures.
CEN: European Committee for Standardization (Comité Européen de Normalisation).
TWA: Time Weighted Average.
STEL: Short-term Exposure Limit.
LD50: Lethal Dose 50%.
LC50: Lethal Concentration 50%.
EC50: Effective Concentration 50%.
NOEL: No observed effect level.
BOD: Biochemical oxygen demand.
TOC: Total Organic Carbon.
ADR: European agreement concerning the international carriage of dangerous goods by road (Accord européen relatif transport des marchandises dangereuses par route).
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures).
IMDG Code: International Maritime Dangerous Goods Code.
RID: Regulations concerning the international carriage of dangerous goods by rail (Règlement International concernant le transport de marchandises dangereuses par chemin de fer).
Safety data sheets of raw materials.

References

Information on evaluation method leading to the classification of mixture

The physical, health and environmental hazards of this mixture are assessed by applying the classification criteria for each hazard class or differentiation in Parts 2 to 5 of Annex I to Regulation (EC) No 1272/2008 (CLP).

Full text of any H-statements not written out in full under Sections 2 to 15

H225 Highly flammable liquid and vapour.
H290 May be corrosive to metals.
H301 Toxic if swallowed.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H331 Toxic if inhaled.
H370 Causes damage to organs.

Revision information

This document has undergone significant changes and should be reviewed in its entirety.

Training information

Provide training on safe handling while considering the type of application and exposure scenarios.

Based on EC Directive / Regulations

(EC) No 1907/2006 (REACH)
(EU) 2015/830
(EC) No 1272/2008
(EU) No 1357/2014

Further information

Correction in Section: 1,2,3,4,11,15,16