

AccuSPEC pH buffer solution: pH 7.Traceable to NIST.

Revision: 15.12.2023

Product code: AC18.07139

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1. Identification**Product identifier**

AccuSPEC pH buffer solution: pH 7.Traceable to NIST.

Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**Reagents and laboratory chemicals
Only for laboratory and analysis purposes.**Uses advised against**

Do not use for private purposes (household).

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

Company name: AnalytiChem Services, Unipessoal, Lda
Street: Rua de Júlio Dinis 676 7º
Place: P-4050-320 Porto
Telephone: +351 226002917
E-mail: info@analytichem.com
Contact person: SDS service department
E-mail: SDS@analytichem.com
Internet: www.analytichem.com
Responsible Department: SDS service department

Supplier or manufacturer details

Company name: AnalytiChem Canada Inc.
Street: Québec, CANADA
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CDN-H9X 4B6 Baie-D'Urfé
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E-mail: info@analytichem.com
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Australia: ORE Research & Exploration Pty Ltd, 37A Hosie Street, Bayswater North, 3153, Australia, +61 3 9729 0333
Telefax: +1 (800) 253-5549

Emergency telephone number:

+1 703-741-5970 (CHEMTREC)

Further Information

This product is a mixture. REACH Registration Number see section 3.

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2. Hazard identification**Classification of the substance or mixture****Regulation (EC) No 1272/2008**

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

Label elements**Regulation (EC) No 1272/2008****Hazard statements**

EUH208 Contains formaldehyde. May produce an allergic reaction.
EUH210 Safety data sheet available on request.

Other hazards

No data available

3. Composition/information on ingredients**Mixtures****Chemical characterization**

Mixtures in aqueous solution

Relevant ingredients

CAS No	Chemical name	Quantity		
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
50-00-0	formaldehyde			< 0.1 %
	200-001-8	605-001-00-5	01-2119488953-20	
	Carc. 1B, Muta. 2, Acute Tox. 2, Acute Tox. 3, Acute Tox. 3, Skin Corr. 1B, Eye Dam. 1, Skin Sens. 1A, STOT SE 3; H350 H341 H330 H311 H301 H314 H318 H317 H335 EUH071			

Full text of H statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
50-00-0	200-001-8	formaldehyde	< 0.1 %
	inhalation: LC50 = < 463 mg/l (vapours); inhalation: ATE 100 ppm (gases); dermal: ATE = 300 mg/kg; oral: ATE 500 mg/kg Skin Corr. 1B; H314: >= 25 - 100 Skin Irrit. 2; H315: >= 5 - < 25 Eye Irrit. 2; H319: >= 5 - < 25 STOT SE 3; H335: >= 5 - 100		

Further Information

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

4. First-aid measures**Description of first aid measures****General information**

No data available

After inhalation

Provide fresh air.

After contact with skin

Wash immediately with: Water

Take off immediately all contaminated clothing and wash it before reuse.

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In case of skin irritation, consult a physician.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

In case of eye irritation consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water.

Call a physician immediately.

Most important symptoms and effects, whether acute or delayed

Allergic reactions

Indication of immediate medical attention and special treatment needed

No data available

5. Fire-fighting measures**Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

no restriction

Specific hazards arising from the hazardous product

Non-combustible liquids

Special protective equipment and precautions for fire-fighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Use water spray jet to protect personnel and to cool endangered containers.

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

6. Accidental release measures**Personal precautions, protective equipment and emergency procedures****General advice**

No data available

For non-emergency personnel

Provide adequate ventilation.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.

Emergency procedures

Consult an expert

Do not breathe dust/fume/gas/mist/vapours/spray.

For emergency responders

Precautionary statements For emergency responders : Personal protection equipment: see section 8

Environmental precautions

Do not allow to enter into surface water or drains.

Methods and material for containment and cleaning up**For containment**

Cover drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Collect in closed and suitable containers for disposal.

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For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

Other information

Provide adequate ventilation.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

7. Handling and storage**Precautions for safe handling****Advice on safe handling**

Handle and open container with care.

Keep container tightly closed.

Do not breathe vapour/aerosol.

Avoid contact with skin, eyes and clothes.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Wash contaminated clothing prior to re-use.

Do not breathe vapour/aerosol.

Avoid contact with skin, eyes and clothes.

Further information on handling

Wash contaminated clothing before reuse.

Wash hands before breaks and after work.

Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed.

Hints on joint storage

No data available

Further information on storage conditions

Store in a dry place.

Specific end use(s)

Laboratory chemicals

8. Exposure controls/Personal protection**Control parameters****Exposure limits (ACGIH)**

CAS No	Chemical name	ppm	mg/m ³	Category	Origin
50-00-0	Formaldehyde	0.1	0.12	TWA (8 h)	ACGIH-2025
		0.3	0.37	STEL (15 min)	ACGIH-2025

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DNEL/DMEL values

CAS No	Chemical name		
DNEL type	Exposure route	Effect	Value
50-00-0	formaldehyde		
Worker DNEL, long-term	inhalation	systemic	9 mg/m ³
Worker DNEL, long-term	inhalation	local	0,375 mg/m ³
Worker DNEL, long-term	dermal	systemic	240 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	3,2 mg/m ³
Consumer DNEL, long-term	inhalation	local	0,1 mg/m ³
Consumer DNEL, long-term	dermal	systemic	102 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	4,1 mg/kg bw/day
Worker DNEL, acute	inhalation	local	0,75 mg/m ³

PNEC values

CAS No	Chemical name	
Environmental compartment	Value	
50-00-0	formaldehyde	
Freshwater	0,44 mg/l	
Freshwater (intermittent releases)	4,44 mg/l	
Marine water	0,44 mg/l	
Freshwater sediment	2,3 mg/kg	
Marine sediment	2,3 mg/kg	
Micro-organisms in sewage treatment plants (STP)	0,19 mg/l	
Soil	0,2 mg/kg	

Exposure controls**Appropriate engineering controls**

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Individual protection measures, such as personal protective equipment**Eye/face protection**

goggles

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Skin protection

Wear suitable protective clothing.

Wash hands before breaks and after work.

Respiratory protection

Respiratory protection necessary at: aerosol or mist formation

Thermal hazards

No data available

Environmental exposure controls

Do not allow to enter into surface water or drains.

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9. Physical and chemical properties**Information on basic physical and chemical properties**

Physical state:	Liquid	
Colour:	colourless	
Odour:	odourless	
Odour threshold:	No data available	
Melting point/freezing point:		No data available
Boiling point or initial boiling point and boiling range:		No data available
Flammability:		No data available
Lower explosive limits:		No data available
Upper explosive limits:		No data available
Flash point:		No data available
Auto-ignition temperature:		No data available
Decomposition temperature:		No data available
pH-Value:		7
Viscosity / kinematic:		No data available
Water solubility:		No data available
Solubility in other solvents		
No data available		
Dissolution rate:		No data available
Partition coefficient n-octanol/water:		No data available
Dispersion stability:		No data available
Vapour pressure:		No data available
Vapour pressure:		No data available
Density:		No data available
Relative density:		No data available
Bulk density:		No data available
Relative vapour density:		No data available
Particle characteristics:		No data available

Other information**Information with regard to physical hazard classes**

Explosive properties	
No data available	
Sustained combustibility:	No data available
Self-ignition temperature	
Solid:	No data available
Gas:	No data available
Oxidizing properties	
No data available	

Other safety characteristics

Evaporation rate:	No data available
Solvent separation test:	No data available
Solvent content:	No data available
Solid content:	0
Sublimation point:	No data available
Softening point:	No data available
Pour point:	No data available
No data available:	

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Viscosity / dynamic:

No data available

Flow time:

No data available

Further Information

No data available

10. Stability and reactivity**Reactivity**

There are no data available on the mixture itself.

Chemical stability

There are no data available on the mixture itself.

Possibility of hazardous reactions

There are no data available on the mixture itself.

Conditions to avoid

There are no data available on the mixture itself.

Incompatible materials

There are no data available on the mixture itself.

Hazardous decomposition products

There are no data available on the mixture itself.

Further information

There are no data available on the mixture itself.

11. Toxicological information**Information on toxicological effects****Toxicokinetics, metabolism and distribution**

There are no data available on the mixture itself.

Acute toxicity

Based on available data, the classification criteria are not met.

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name				
	Route of exposure	Dose	Species	Source	Method
50-00-0	formaldehyde				
	oral	ATE 500 mg/kg			
	dermal	ATE 300 mg/kg			
	inhalation (4 h) vapour	LC50 < 463 mg/l	Rat	Study report (2015)	OECD Guideline 403
	inhalation gas	ATE 100 ppm			

Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Sensitizing effects

Based on available data, the classification criteria are not met.

Contains formaldehyde. May produce an allergic reaction.

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Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Information on likely routes of exposure

There are no data available on the mixture itself.

Specific effects in experiment on an animal

There are no data available on the mixture itself.

Additional information on tests

There are no data available on the mixture itself.

Practical experience

There are no data available on the mixture itself.

Information on other hazards**Endocrine disrupting properties**

There are no data available on the mixture itself.

Other information

There are no data available on the mixture itself.

Further information

There are no data available on the mixture itself.

12. Ecological information**Ecotoxicity**

Based on available data, the classification criteria are not met.

CAS No	Chemical name						
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method	
50-00-0	formaldehyde						
	Acute fish toxicity	LC50 mg/l	27,57	96 h	Ictalurus punctatus	Prog.Fish-Cult. 20(1):8-15 (1958)	acute toxicity test; "static bioassay"
	Acute algae toxicity	ErC50 mg/l	3,48	72 h	Desmodesmus subspicatus	Ecotoxicol Environ Safety 54: 346-354 (2)	OECD Guideline 201
	Acute crustacea toxicity	EC50	5,8 mg/l	48 h	Daphnia pulex	Water, Air and Soil Pollution 97, 315-32	OECD Guideline 202
	Fish toxicity	NOEC mg/l	>= 48	28 d	Oryzias latipes	NTIS (ed.) Compendium of the FY1988 and	OECD Guideline 215
	Crustacea toxicity	NOEC mg/l	>= 6,4	21 d	Daphnia magna	Study report (2008)	OECD Guideline 211
	Acute bacteria toxicity	EC50	19 mg/l ()	3 h	Activated sludge	Chemosphere 14, 1239-1251 (1985)	OECD Guideline 209

Persistence and degradability

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There are no data available on the mixture itself.

Bioaccumulative potential

There are no data available on the mixture itself.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
50-00-0	formaldehyde	0,35

BCF

CAS No	Chemical name	BCF	Species	Source
50-00-0	formaldehyde	< 1	Paralichthys olivaceus and Sebastes schlegeli	Aquaculture 194, 253

Mobility in soil

There are no data available on the mixture itself.

Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

Other adverse effects

There are no data available on the mixture itself.

Further information

Do not allow to enter into surface water or drains.

13. Disposal considerations**Waste treatment methods****Disposal recommendations**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Do not allow to enter into surface water or drains.

Contaminated packaging

Waste codes/waste designations according to EWC/AVV

14. Transport information**Land transport (ADR/RID)****UN number or ID number:**

No dangerous good in sense of this transport regulation.

United Nations proper shipping name:

No dangerous good in sense of this transport regulation.

Transport hazard class(es):

No dangerous good in sense of this transport regulation.

Packing group:

No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)**UN number or ID number:**

No dangerous good in sense of this transport regulation.

United Nations proper shipping name:

No dangerous good in sense of this transport regulation.

Transport hazard class(es):

No dangerous good in sense of this transport regulation.

Packing group:

No dangerous good in sense of this transport regulation.

Marine transport (IMDG)**UN number or ID number:**

No dangerous good in sense of this transport regulation.

United Nations proper shipping name:

No dangerous good in sense of this transport regulation.

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Transport hazard class(es): No dangerous good in sense of this transport regulation.**Packing group:** No dangerous good in sense of this transport regulation.**Air transport (ICAO-TI/IATA-DGR)****UN number or ID number:** No dangerous good in sense of this transport regulation.**United Nations proper shipping name:** No dangerous good in sense of this transport regulation.**Transport hazard class(es):** No dangerous good in sense of this transport regulation.**Packing group:** No dangerous good in sense of this transport regulation.**Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

Special precautions for user

No dangerous good in sense of this transport regulation.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No dangerous good in sense of this transport regulation.

15. Regulatory information**Safety, health and environmental regulations/legislation specific for the substance or mixture****EU Regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 28, Entry 75

National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

Additional information

No data available

16. Other information**Abbreviations and acronyms**

Acute Tox. 2: Acute toxicity

Acute Tox. 3: Acute toxicity

Skin Corr. 1B: Skin corrosion

Eye Dam. 1: Serious eye damage

Skin Sens. 1A: Skin sensitization

Muta. 2: Germ cell mutagenicity

Carc. 1B: Carcinogenicity

STOT SE 3: Specific target organ toxicity - single exposure

Relevant H statements (number and full text)

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H330 Fatal if inhaled.

H335 May cause respiratory irritation.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

EUH071 Corrosive to the respiratory tract.

EUH208 Contains formaldehyde. May produce an allergic reaction.

EUH210 Safety data sheet available on request.

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Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

Provide appropriate information, instructions and training to users

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)