Buffer pH 4.00 @ 25°C (Red)

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Date of issue: 01/25/2016 Version: 1.0

SECTION 1: Identification

1.1. Product identifier

Product form : Mixture

Product name : Buffer pH 4.00 @ 25°C (Red)

Product code : B5140

Product group : Blend

1.2. Recommended use and restrictions on use

Recommended uses and restrictions : Laboratory chemicals

1.3. Supplier

Produits Chimiques ACP Chemicals Inc.
4601, boul. des Grandes Prairies
Montreal, Quebec H1R 1A5
www.acpchem.com

1.4. Emergency telephone number

Emergency number : (613) 996-6666 (CANUTEC)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-CA)

STOT RE 2 H373

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS-CA labelling

Hazard pictograms (GHS-CA) :

GHS08

Signal word (GHS-CA)Hazard statements (GHS-CA) : Warning

Hazard statements (GHS-CA) : May cause damage to organs (nervous system, kidneys, intestinal tract) through prolonged or repeated exposure

Precautionary statements (GHS-CA) : Do not breathe mist, spray
Get medical advice/attention if you feel unwell
Dispose of contents/container to Comply with applicable regulations

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

2.4. Unknown acute toxicity (GHS-CA)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification (GHS-CA)
Water	(CAS No) 7732-18-5	98.955	Not classified
Potassium Hydrogen Phthalate	(CAS No) 877-24-7	1.033	Eye Irrit. 2B, H320
Mercuric Iodide	(CAS No) 7774-29-0	0.005	Acute Tox. 2 (Oral), H300 Acute Tox. 2 (Dermal), H310 Acute Tox. 2 (Inhalation:gas), H330 STOT SE 2, H371 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Potassium Iodide	(CAS No) 7681-11-0	0.003	Not classified

Name	Product identifier	%	Classification (GHS-CA)
Sodium Hydroxide	(CAS No) 1310-73-2	0.002	Acute Tox. 4 (Dermal), H312 Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402
FD&C Red 40	(CAS No) 25956-17-6	0.002	Not classified

Full text of H-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.

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 (acute and delayed)

Symptoms/injuries : May cause damage to organs (nervous system, intestinal tract, kidneys).

Chronic symptoms : Behavioural disturbances. Impaired memory. Movement disturbances. Tremor.

4.3. Immediate medical attention and special treatment, if necessary

Treatment : Treat symptomatically.

Antidote : CHELATING AGENTS.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

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

5.2. Unsuitable extinguishing media

No additional information available

5.3. Specific hazards arising from the hazardous product

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

5.3. Special protective equipment and precautions for fire-fighters

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

Personal Precautions, Protective Equipment and Emergency Procedures : Chemical goggles or safety glasses. Protective gloves.

6.2. Methods and materials for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Carefully collect the spill/leftovers.

Other information : Dispose of materials or solid residues at an authorized site.

6.3. Reference to other sections

Sea transport (IMO)

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. Do not breathe mist, spray.

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 cool.

Incompatible products : None known.

Incompatible materials : None known.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Sodium Hydroxide (1310-73-2)		
USA - ACGIH	ACGIH Ceiling (mg/m³)	2 mg/m³ (Sodium hydroxide; USA; Momentary value; TLV - Adopted Value)

Sodium Hydroxide (1310-73-2)		
USA - OSHA	OSHA PEL (TWA) (mg/m³)	2 mg/m³
Canada (Quebec)	PLAFOND (mg/m³)	2 mg/m³
Canada (Quebec)	Notations and remarks	RP
Alberta	OEL Ceiling (mg/m³)	2 mg/m³
British Columbia	OEL Ceiling (mg/m³)	2 mg/m³
Manitoba	OEL Ceiling (mg/m³)	2 mg/m³
New Brunswick	OEL Ceiling (mg/m³)	2 mg/m³
New Foundland & Labrador	OEL Ceiling (mg/m³)	2 mg/m³
Nova Scotia	OEL Ceiling (mg/m³)	2 mg/m³
Nunavut	OEL Ceiling (mg/m³)	2 mg/m³
Northwest Territories	OEL Ceiling (mg/m³)	2 mg/m³
Ontario	OEL Ceiling (mg/m³)	2 mg/m³
Prince Edward Island	OEL Ceiling (mg/m³)	2 mg/m³
Québec	PLAFOND (mg/m³)	2 mg/m³
Québec	Notations and remarks	RP
Saskatchewan	OEL Ceiling (mg/m³)	2 mg/m³
Yukon	OEL Ceiling (mg/m³)	2 mg/m³

Potassium Iodide (7681-11-0)		
USA - ACGIH	ACGIH TWA (ppm)	0.01 ppm Inhalable fraction

Mercuric Iodide (7774-29-0)		
USA - ACGIH	ACGIH TWA (mg/m³)	0.025 mg/m³ as Hg, Skin
USA - OSHA	OSHA PEL (TWA) (mg/m³)	0.1 mg/m³ as Hg

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

8.3. Individual protection measures/Personal protective equipment

Hand protection : Protective gloves.
Eye protection : Safety glasses.
Skin and body protection : Wear suitable protective clothing.
Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
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
Appearance : No data available
Colour : pink.
Odour : None.
Odour threshold : No data available
pH : 4
pH solution : No data available
Relative evaporation rate (butylacetate=1) : No data available
Relative evaporation rate (ether=1) : No data available
Melting point : Not applicable
Freezing point : No data available
Boiling point : No data available
Flash point : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : Not applicable
Vapour pressure : No data available
Vapour pressure at 50 °C : No data available
Relative vapour density at 20 °C : No data available
Relative density : No data available
Relative density of saturated gas/air mixture : No data available
Density : 1 g/ml
Relative gas density : No data available

Solubility	:	Soluble in water.
Log Pow	:	No data available
Log Kow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, kinematic (calculated value) (40 °C)	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	No data available
Lower explosive limit (LEL)	:	No data available
Upper explosive limit (UEL)	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

Reactivity in case of fire	:	The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	No dangerous reactions known under normal conditions of use.
Conditions to avoid	:	None under recommended storage and handling conditions (see section 7).
Incompatible materials	:	No data available.
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

Likely routes of exposure : Skin and eye contact.

11.1. Information on toxicological effects

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

Potassium Hydrogen Phthalate (877-24-7)	
LD50 oral rat	≥ 3200 mg/kg

Mercuric Iodide (7774-29-0)	
LD50 oral rat	18 mg/kg
LD50 dermal rat	75 mg/kg

Water (7732-18-5)	
LD50 oral rat	≥ 90000 mg/kg

Skin corrosion/irritation	:	Not classified pH: 4
Serious eye damage/irritation	:	Not classified pH: 4
Respiratory or skin sensitization	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
Specific target organ toxicity (single exposure)	:	Not classified
Specific target organ toxicity (repeated exposure)	:	May cause damage to organs (nervous system, kidneys, intestinal tract) through prolonged or repeated exposure.
Aspiration hazard	:	Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Not classified due to lack of data.

Sodium Hydroxide (1310-73-2)	
LC50 fish 1	45.4 mg/l (LC50; Other; 96 h; Salmo gairdneri; Static system; Fresh water; Experimental value)

Potassium Iodide (7681-11-0)	
LC50 fish 1	3200 mg/l 120 h
EC50 Daphnia 1	2.7 mg/l 24 h

12.2. Persistence and degradability

Buffer pH 4.00 @ 25°C (Red)	
Persistence and degradability	No test data available.

Potassium Hydrogen Phthalate (877-24-7)	
Persistence and degradability	Not established.

Sodium Hydroxide (1310-73-2)	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

Potassium Iodide (7681-11-0)	
Persistence and degradability	Not established.

Water (7732-18-5)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Buffer pH 4.00 @ 25°C (Red)	
Bioaccumulative potential	Potential for bioaccumulation (500 ≤ BCF ≤ 5000).

Potassium Hydrogen Phthalate (877-24-7)	
Bioaccumulative potential	Not established.

Sodium Hydroxide (1310-73-2)	
Bioaccumulative potential	No bioaccumulation data available.

Potassium Iodide (7681-11-0)	
Bioaccumulative potential	Not established.

Water (7732-18-5)	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Waste disposal recommendations : Do not discharge into drains or the environment. Dispose of at authorized waste collection point.

SECTION 14: Transport information

14.1. Basic shipping description

In accordance with TDG

TDG

Not regulated for transport

DOT

Not regulated for transport

14.3. Air and sea transport

IMDG

No additional information available

IATA

No additional information available

SECTION 15: Regulatory information

National/international regulations

No additional information available

SECTION 16: Other information

SDS Major/Minor : None

Date of issue : 25/01/2016

Full text of H-statements:

H300	Fatal if swallowed
H310	Fatal in contact with skin
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H320	Causes eye irritation
H330	Fatal if inhaled
H371	May cause damage to organs
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects

SDS Canada ACP

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