

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/27/2023

Reviewed on 03/08/2019

1 Identification

***Product identifier**

***Trade name:** BUFFER SOLUTION pH 2.00 ±0.02 @ 25°C

***Article number:** 102025

***Application of the substance / the mixture** Laboratory chemicals

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

***Manufacturer/Supplier:**

Reagecon Diagnostics Ltd.

Shannon Free Zone,

Shannon,

Co. Clare,

Ireland.

Tel +353 61 472622

Fax +353 61 472642

***Information department:** sds@reagecon.ie

***Emergency telephone number:**

National Poisons Information Centre: +353 (1) 809 2166 (8.00 a.m. to 10.00 p.m. 7 days a week)

Healthcare Professionals: +353 (1) 809 2566 (24 hour service)

For Hazardous Materials [or Dangerous Goods] Incident
Spill, Leak, Fire, Exposure, or Accident

Call CHEMTREC

For Ireland call +(353)-19014670

For Outside Ireland call +1 703-741-5970 / 1-800-424-9300 CCN849800

2 Hazard(s) identification

***Classification of the substance or mixture**

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

***Label elements**

***GHS label elements** Void

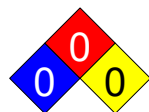
***Hazard pictograms** Void

***Signal word** Void

***Hazard statements** Void

***Classification system:**

***NFPA ratings (scale 0-4)**



Health = 0

Fire = 0

Reactivity = 0

***Other hazards**

***Results of PBT and vPvB assessment**

***PBT:** Not applicable.

***vPvB:** Not applicable.

3 Composition/information on ingredients

***Chemical characterization: Mixtures**

***Description:** Mixture of the substances listed below with nonhazardous additions.

***Dangerous components:**

CAS: 7647-01-0	hydrochloric acid 37%	<1%
----------------	-----------------------	-----

***Non- Hazardous Components**

CAS: 7732-18-5	PURIFIED WATER	50-100%
----------------	----------------	---------

CAS: 56-40-6	glycine	≤2.5%
--------------	---------	-------

(Contd. on page 2)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/27/2023

Reviewed on 03/08/2019

Trade name: BUFFER SOLUTION pH 2.00 ±0.02 @ 25°C

(Contd. of page 1)		
CAS: 7647-14-5	sodium chloride	≤2.5%
CAS: 7774-29-0	mercury diiodide	<0.1%
CAS: 7681-11-0	potassium iodide	≤2.5%

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.
- *Information for 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:** Use fire fighting measures that suit the environment.
- *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.
Do not allow to enter sewers/ surface or ground 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.
- *Protective Action Criteria for Chemicals**

*PAC-1:		
CAS: 7774-29-0	mercury diiodide	0.17 mg/m ³
CAS: 7681-11-0	potassium iodide	1.3 mg/m ³
*PAC-2:		
CAS: 7774-29-0	mercury diiodide	0.23 mg/m ³
CAS: 7681-11-0	potassium iodide	15 mg/m ³
*PAC-3:		
CAS: 7774-29-0	mercury diiodide	63 mg/m ³
CAS: 7681-11-0	potassium iodide	87 mg/m ³

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/27/2023

Reviewed on 03/08/2019

Trade name: BUFFER SOLUTION pH 2.00 ±0.02 @ 25°C

(Contd. of page 2)

7 Handling and storage

***Handling:**

***Precautions for safe handling** No special measures required.

***Information about protection against explosions and fires:** No special measures required.

***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.

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.

Nitrile rubber, NBR

***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.

9 Physical and chemical properties

***Information on basic physical and chemical properties**

***General Information**

***Appearance:**

Form: Fluid

Color: Colorless

***Odor:** Odorless

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/27/2023

Reviewed on 03/08/2019

Trade name: BUFFER SOLUTION pH 2.00 ±0.02 @ 25°C

(Contd. of page 3)

*Odor 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.
*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 (17.3 mm Hg)
*Density at 20 °C (68 °F):	1.00554 g/cm ³ (8.39123 lbs/gal)
*Relative density	Not determined.
*Vapor density	Not determined.
*Evaporation rate	Not determined.
*Solubility in / Miscibility with	
Water:	Fully miscible.
*Partition coefficient (n-octanol/water):	Not determined.
*Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
*Solvent content:	
Water:	98.9 %
Solids content:	0.7 %
*Other information	No further relevant information available.

10 Stability and reactivity

- *Reactivity** No further relevant information available.
- *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.

(Contd. on page 5)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/27/2023

Reviewed on 03/08/2019

Trade name: BUFFER SOLUTION pH 2.00 ±0.02 @ 25°C

(Contd. of page 4)

***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.

***Carcinogenic categories**

***IARC (International Agency for Research on Cancer)**

CAS: 7774-29-0	mercury diiodide	3
----------------	------------------	---

***NTP (National Toxicology Program)**

None of the ingredients is listed.

***OSHA-Ca (Occupational Safety & Health Administration)**

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.

***Behavior in environmental systems:**

***Bioaccumulative potential** No further relevant information available.

***Mobility in soil** No further relevant information available.

***Additional ecological information:**

***General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

***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	Void
-----------------------------------	------

*Class	Void
---------------	------

(Contd. on page 6)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/27/2023

Reviewed on 03/08/2019

Trade name: **BUFFER SOLUTION pH 2.00 ±0.02 @ 25°C**

(Contd. of page 5)

*Packing group	
*DOT, ADR, IMDG, IATA	Void
*Environmental hazards:	
*Marine pollutant:	No
*Special precautions for user	Not applicable.
*Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.
*Transport/Additional information:	Not dangerous according to the above specifications.
*UN "Model Regulation":	Void

15 Regulatory information

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

***SARA Section 355 (extremely hazardous substances)**

None of the ingredients is listed.

***SARA Section 313 (specific toxic chemical listings)**

CAS: 7774-29-0 mercury diiodide

***TSCA (Toxic Substances Control Act)**

CAS: 7732-18-5	PURIFIED WATER	ACTIVE
CAS: 56-40-6	glycine	ACTIVE
CAS: 7647-14-5	sodium chloride	ACTIVE
CAS: 7774-29-0	mercury diiodide	ACTIVE
CAS: 7681-11-0	potassium iodide	ACTIVE

***Hazardous Air Pollutants**

CAS: 7774-29-0 mercury diiodide

***Prop 65 - Chemicals known to cause cancer**

None of the ingredients is listed.

***Carcinogenicity categories**

***EPA (Environmental Protection Agency)**

CAS: 7774-29-0 mercury diiodide D

***TLV (Threshold Limit Value)**

CAS: 7774-29-0 mercury diiodide A4

***MAK (German Maximum Workplace Concentration)**

CAS: 7774-29-0 mercury diiodide 3B

***NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

***GHS label elements** Void

***Hazard pictograms** Void

***Signal word** Void

***Hazard statements** Void

***National regulations:**

***Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

***Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

US

(Contd. on page 7)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/27/2023

Reviewed on 03/08/2019

Trade name: BUFFER SOLUTION pH 2.00 ±0.02 @ 25°C

(Contd. of page 6)

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 SDS:** Health and Safety

***Contact:** sds@reagecon.ie

***Date of preparation / last revision** 06/27/2023

***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 Organisation

ADR: Accord relatif au transport international 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 Transportation

IATA: International Air Transport Association

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)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit