

# 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 @ 20°C

**\*Article number:** 1020

**\*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](mailto: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)**



**\*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%
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**\*Non- Hazardous Components**

CAS: 7732-18-5	PURIFIED WATER	50-100%
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CAS: 56-40-6	glycine	≤2.5%
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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 <sup>3</sup>
CAS: 7681-11-0	potassium iodide	1.3 mg/m <sup>3</sup>

**\*PAC-2:**

CAS: 7774-29-0	mercury diiodide	0.23 mg/m <sup>3</sup>
CAS: 7681-11-0	potassium iodide	15 mg/m <sup>3</sup>

**\*PAC-3:**

CAS: 7774-29-0	mercury diiodide	63 mg/m <sup>3</sup>
CAS: 7681-11-0	potassium iodide	87 mg/m <sup>3</sup>

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### 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:** Characteristic

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<b>*Odor threshold:</b>	Not determined.
<b>*pH-value:</b>	Not determined.
<b>*Change in condition</b>	
<b>Melting point/Melting range:</b>	0 °C (32 °F)
<b>Boiling point/Boiling range:</b>	100 °C (212 °F)
<b>*Flash point:</b>	Not applicable.
<b>*Flammability (solid, gaseous):</b>	Not applicable.
<b>*Decomposition temperature:</b>	Not determined.
<b>*Auto igniting:</b>	Product is not selfigniting.
<b>*Danger of explosion:</b>	Product does not present an explosion hazard.
<b>*Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
<b>*Vapor pressure at 20 °C (68 °F):</b>	23 hPa (17.3 mm Hg)
<b>*Density at 20 °C (68 °F):</b>	1.00554 g/cm <sup>3</sup> (8.39123 lbs/gal)
<b>*Relative density</b>	Not determined.
<b>*Vapor density</b>	Not determined.
<b>*Evaporation rate</b>	Not determined.
<b>*Solubility in / Miscibility with</b>	
<b>Water:</b>	Fully miscible.
<b>*Partition coefficient (n-octanol/water):</b>	Not determined.
<b>*Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
<b>*Solvent content:</b>	
<b>Water:</b>	98.9 %
<b>Solids content:</b>	0.7 %
<b>*Other information</b>	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.

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**\*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
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**\*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**

<b>*DOT, ADR, ADN, IMDG, IATA</b>	Void
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**\*UN proper shipping name**

<b>*DOT, ADR, ADN, IMDG, IATA</b>	Void
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**\*Transport hazard class(es)**

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

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**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*