

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 3.00 ± 0.02 @ 20°C

***Article number:** 1030

***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)**



***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: 877-24-7	potassium hydrogen phthalate	≤2.5%
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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: 877-24-7	potassium hydrogen phthalate	9.6 mg/m ³
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: 877-24-7	potassium hydrogen phthalate	110 mg/m ³
CAS: 7774-29-0	mercury diiodide	0.23 mg/m ³
CAS: 7681-11-0	potassium iodide	15 mg/m ³

***PAC-3:**

CAS: 877-24-7	potassium hydrogen phthalate	630 mg/m ³
CAS: 7774-29-0	mercury diiodide	63 mg/m ³

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CAS: 7681-11-0 potassium iodide

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87 mg/m³

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.

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9 Physical and chemical properties

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

***General Information**

***Appearance:**

Form:	Fluid
Color:	Colorless
*Odor:	Characteristic
*Odor threshold:	Not determined.

***pH-value at 20 °C (68 °F):** 3

***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):** 1.00085 g/cm³ (8.35209 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: 98.8 %

Solids content: 1.0 %

***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.

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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.

***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 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

***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.

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14 Transport information

*UN-Number	Void
*DOT, ADR, ADN, IMDG, IATA	Void
*UN proper shipping name	Void
*DOT, ADR, ADN, IMDG, IATA	Void
*Transport hazard class(es)	
*DOT, ADR, ADN, IMDG, IATA	
*Class	Void
*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 MARPOL73/78 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: 877-24-7	potassium hydrogen phthalate	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		

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Signal word** VoidHazard statements** Void***National regulations:*****Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.***Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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 SafetyContact:** 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