

Safety data sheet
according to 1907/2006/EC, Article 31

Printing 19.08.2019

version number 40

Revision: 19.08.2019

SECTION 1: Identification of the substance/mixture and of the company/undertaking

***1.1 Product identifier**

***Trade name:** MERCURIC BROMIDE PAPER

***Article number:** 1052101

***Registration number**

A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

***1.2 Relevant identified uses of the substance or mixture and uses advised against**

No further relevant information available.

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

***1.3 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

***Further information obtainable by contacting:** sds@reagecon.ie

***1.4 Emergency telephone number:**

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

SECTION 2: Hazards identification

***2.1 Classification of the substance or mixture**

***Classification according to Regulation (EC) No 1272/2008**



GHS06 skull and crossbones

Acute Tox. 2 H300 Fatal if swallowed.

Acute Tox. 1 H310 Fatal in contact with skin.

Acute Tox. 2 H330 Fatal if inhaled.



GHS08 health hazard

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

(Contd. on page 2)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing 19.08.2019

version number 40

Revision: 19.08.2019

Trade name: MERCURIC BROMIDE PAPER

(Contd. of page 1)

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

***Hazard pictograms**

GHS06

GHS08

GHS09

Signal word Danger**Hazard-determining components of labelling:**

mercury dibromide

***Hazard statements**

H300+H310+H330 Fatal if swallowed, in contact with skin or if inhaled.

H319 Causes serious eye irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

H410 Very toxic to aquatic life with long lasting effects.

***Precautionary statements**

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P330 Rinse mouth.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P320 Specific treatment is urgent (see on this label).

P361+P364 Take off immediately all contaminated clothing and wash it before reuse.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards**Results of PBT and vPvB assessment*****PBT:** Not applicable.***vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients*****3.2 Chemical characterisation: Mixtures*****Description:** Mixture of substances listed below with nonhazardous additions.***Dangerous components:**

CAS: 64-17-5 EINECS: 200-578-6	ethyl alcohol Flam. Liq. 2, H225; Eye Irrit. 2, H319	50-100%
CAS: 7789-47-1 EINECS: 232-169-3	mercury dibromide Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 2, H330; STOT RE 2, H373; Aquatic Acute 1, H400; Aquatic Chronic 1, H410	25%

Additional information:** For the wording of the listed hazard phrases refer to section 16.**SECTION 4: First aid measures**4.1 Description of first aid measures*****General information:**

Immediately remove any clothing soiled by the product.

Remove breathing equipment only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing 19.08.2019

version number 40

Revision: 19.08.2019

Trade name: MERCURIC BROMIDE PAPER

(Contd. of page 2)

***After inhalation:**

Provide fresh air, warmth and rest. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Obtain medical attention.

In case of unconsciousness place patient stably in side position for transportation.

***After skin contact:**

Remove contaminated clothing and rinse skin thoroughly with water. Get medical attention if any discomfort continues.

***After eye contact:**

Promptly wash eyes with plenty of water for up to 15 minutes. Open eyes wide apart and rinse well to remove any contact lenses. Do not remove contact lenses by hand. Get medical attention. Continue to rinse.

***After swallowing:**

Do not induce vomiting; call for medical help immediately. Rinse mouth thoroughly with water and give large amounts of water to drink. Never give anything by mouth to an unconscious person.

***4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

***4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

SECTION 5: Firefighting measures***5.1 Extinguishing media*****Suitable extinguishing agents:**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

***5.2 Special hazards arising from the substance or mixture** No further relevant information available.

***5.3 Advice for firefighters**

***Protective equipment:** Mount respiratory protective device.

SECTION 6: Accidental release measures***6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment as described in Section 8 below. Keep unprotected persons away.

***6.2 Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

***6.3 Methods and material for containment and cleaning up:**

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

***6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage***7.1 Precautions for safe handling**

Thorough dedusting.

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

***Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.

Keep respiratory protective device available.

7.2 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.

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing 19.08.2019

version number 40

Revision: 19.08.2019

Trade name: **MERCURIC BROMIDE PAPER**

(Contd. of page 3)

*Further information about storage conditions: Keep receptacle tightly sealed.

*7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

*8.1 Control parameters

*Ingredients with limit values that require monitoring at the workplace:

CAS: 64-17-5 ethyl alcohol

OEL (Ireland)	Short-term value: 1000 ppm
PEL (USA)	Long-term value: 1900 mg/m ³ , 1000 ppm
REL (USA)	Long-term value: 1900 mg/m ³ , 1000 ppm
TLV (USA)	Short-term value: 1880 mg/m ³ , 1000 ppm

CAS: 7789-47-1 mercury dibromide

OEL (Ireland)	Long-term value: 0.02 mg/m ³ as Hg; IOELV, Repr. 1B
PEL (USA)	Long-term value: 0.1 mg/m ³ as Hg; see OSHA standard interpretation memo
REL (USA)	Long-term value: 0.05* mg/m ³ Ceiling limit: 0.1 mg/m ³ as Hg; *Vapor; Skin
TLV (USA)	Long-term value: 0.025 mg/m ³ as Hg; Skin; BEI

*Ingredients with biological limit values:

CAS: 7789-47-1 mercury dibromide

BEI (USA)	35 µg/L Medium: urine Time: prior to shift Parameter: Total inorganic mercury (background)
	15 µg/L Medium: blood Time: end of shift at end of workweek Parameter: Total inorganic mercury (background)

*Additional information: The lists valid during the making were used as basis.

*8.2 Exposure controls

*Personal protective equipment:

*General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the eyes and skin.

*Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Where risk assessment shows air-purifying respirators are appropriate use a respirator with multi-purpose combination (US) or type ABEK (EN14387) respirator cartridges as back up to engineering controls. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

(Contd. on page 5)

IE

Safety data sheet
according to 1907/2006/EC, Article 31

Printing 19.08.2019

version number 40

Revision: 19.08.2019

Trade name: MERCURIC BROMIDE PAPER

(Contd. of page 4)

***Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Always ensure that gloves are inspected before use.

Selection of protective gloves must include consideration of the penetration times along with rates of diffusion and degradation. The selected glove should comply with the specifications of EU Directive 89/686/EEC and the standard EN374 derived from it.

***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.

Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

***Penetration time of glove material**

In the absence of data above, the exact break through time has to be sourced from the manufacturer of the protective gloves and has to be observed.

Eye protection:** Not required.Engineering Controls:** No further data; see item 7.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties**General Information*****Appearance:**

Form:	Liquid
Colour:	Colourless
*Odour:	Characteristic
*Odour threshold:	Not determined.

*pH-value:	Not applicable.
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***Change in condition**

Melting point/freezing point:	-114.5 °C
Initial boiling point and boiling range:	78 °C

*Flash point:	13 °C
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(Contd. on page 6)

IE

Safety data sheet
according to 1907/2006/EC, Article 31

Printing 19.08.2019

version number 40

Revision: 19.08.2019

Trade name: **MERCURIC BROMIDE PAPER**

(Contd. of page 5)

* Flammability (solid, gas):	Not determined.
* Ignition temperature:	425 °C
* Decomposition temperature:	Not determined.
* Auto-ignition temperature:	Product is not selfigniting.
* Explosive properties:	Product does not present an explosion hazard.
* Explosion limits:	
Lower:	3.5 Vol %
Upper:	15 Vol %
* Vapour pressure at 20 °C:	59 hPa
* Density at 20 °C:	2.11975 g/cm ³
* Relative density	Not determined.
* Vapour density	Not applicable.
* Evaporation rate	Not applicable.
* Solubility/ miscibility with water at 20 °C:	1.000 g/l
* Partition coefficient: n-octanol/water:	Not determined.
* Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
* Solvent content:	
Organic solvents:	75.0 %
* 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- ***10.1 Reactivity** No further relevant information available.
- ***10.2 Chemical stability**
- ***Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- ***10.3 Possibility of hazardous reactions** No dangerous reactions known.
- ***10.4 Conditions to avoid** No further relevant information available.
- ***10.5 Incompatible materials:** No further relevant information available.
- ***10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- ***11.1 Information on toxicological effects**
- ***Acute toxicity**
Fatal if swallowed, in contact with skin or if inhaled.
- ***Primary irritant effect:**
- ***Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- ***Serious eye damage/irritation**
Causes serious eye irritation.
- ***Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- ***CMR effects (carcinogenicity, mutagenicity and toxicity 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.

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing 19.08.2019

version number 40

Revision: 19.08.2019

Trade name: MERCURIC BROMIDE PAPER

(Contd. of page 6)

***STOT-repeated exposure**

May cause damage to organs through prolonged or repeated exposure.

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

SECTION 12: Ecological information

***12.1 Toxicity**

***Aquatic toxicity:** No further relevant information available.

***12.2 Persistence and degradability** No further relevant information available.

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

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

***Ecotoxicological effects:**

***Remark:** Very toxic for fish

***Additional ecological information:**

***General notes:**

Water hazard class 3 (German Regulation) (Self-assessment): extremely 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.

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

***12.5 Results of PBT and vPvB assessment**

***PBT:** Not applicable.

***vPvB:** Not applicable.

***12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

***13.1 Waste treatment methods**

***Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

***European waste catalogue**

HP4	Irritant - skin irritation and eye damage
HP5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP6	Acute Toxicity
HP14	Ecotoxic

***Uncleaned packaging:**

***Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

***14.1 UN-Number**

***ADR, IMDG, IATA**

UN1634

***14.2 UN proper shipping name**

***ADR**

1634 MERCURY BROMIDES, ENVIRONMENTALLY HAZARDOUS

***IMDG**

MERCURY BROMIDES, MARINE POLLUTANT

***IATA**

MERCURY BROMIDES

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

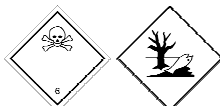
Printing 19.08.2019

version number 40

Revision: 19.08.2019

Trade name: **MERCURIC BROMIDE PAPER**

(Contd. of page 7)

14.3 Transport hazard class(es)**ADR, IMDG*****Class**

6.1 Toxic substances.

***Label**

6.1

IATA**Class**

6.1 Toxic substances.

***Label**

6.1

14.4 Packing group**ADR, IMDG, IATA**

II

***14.5 Environmental hazards:**Product contains environmentally hazardous substances:
mercury dibromide***Marine pollutant:**

Yes

***Special marking (ADR):**Symbol (fish and tree)
Symbol (fish and tree)***14.6 Special precautions for user**

Warning: Toxic substances.

***Danger code (Kemler):**

60

***EMS Number:**

F-A,S-A

***Segregation groups**

Heavy metals and their salts (including their organometallic compounds), mercury and mercury compounds

***Stowage Category**

A

***14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable.

Transport/Additional information:**ADR*****Limited quantities (LQ)**

500 g

***Transport category**

2

***Tunnel restriction code**

D/E

***UN "Model Regulation":**UN 1634 MERCURY BROMIDES, 6.1, II,
ENVIRONMENTALLY HAZARDOUS**SECTION 15: Regulatory information*****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture*****Directive 2012/18/EU*****Named dangerous substances - ANNEX I** None of the ingredients is listed.***Seveso category**

H1 ACUTE TOXIC

E1 Hazardous to the Aquatic Environment

Qualifying quantity (tonnes) for the application of lower-tier requirements** 5 tQualifying quantity (tonnes) for the application of upper-tier requirements** 20 t

(Contd. on page 9)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing 19.08.2019

version number 40

Revision: 19.08.2019

Trade name: **MERCURIC BROMIDE PAPER**

(Contd. of page 8)

*REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 18

*Regulation (EU) No 649/2012

CAS: 7789-47-1	mercury dibromide	Annex I Part 1 Annex I Part 3 Annex V Part 2
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*National regulations:

Class	Share in %
I	25.0
NK	75.0

*Waterhazard class: Water hazard class 3 (Self-assessment): extremely hazardous for water.

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

SECTION 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.

*Relevant Phrases:

H225 Highly flammable liquid and vapour.

H300 Fatal if swallowed.

H310 Fatal in contact with skin.

H319 Causes serious eye irritation.

H330 Fatal if inhaled.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

*Department issuing SDS: Health and Safety

*Contact: sds@reagecon.ie

*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

REACH (Registration, Evaluation, Authorisation and restriction of Chemicals)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Acute Tox. 2: Acute toxicity – Category 2

Acute Tox. 1: Acute toxicity – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

*NO