

1 Identification

***Product identifier**

***Trade name:** **BORIC ACID 4% WITH SHER INDICATOR**
pH 4.65 ± 0.15 @ 20°C

***Article number:** 11064973

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

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

***Manufacturer/Supplier:** See Below

***Manufacturer:**

Reagecon Diagnostics Ltd.
Shannon Free Zone,
Shannon,
Co. Clare,
Ireland.
Tel +353 61 472622
Fax +353 61 472642

***Supplier:**

BÜCHI Labortechnik AG
Meierseggsstrasse 40
CH - 9230 Flawil
Telephone: +41 71 394 63 63
FAX: +41 71 394 65 65
Email: buchi@buchi.com
Internet: www.buchi.com

***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**



GHS08 Health hazard

Toxic to Reproduction 1B H360 May damage fertility or the unborn child.

***Label elements**

***GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

***Hazard pictograms**



GHS08

***Signal word** Danger

***Hazard-determining components of labeling:**

boric acid

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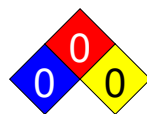
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Hazard statementsMay damage fertility or the unborn child.****Precautionary statements***Obtain special instructions before use.**Do not handle until all safety precautions have been read and understood.**Wear protective gloves/protective clothing/eye protection/face protection.**IF exposed or concerned: Get medical advice/attention.**Store locked up.**Dispose of contents/container in accordance with local/regional/national/international regulations.****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: 10043-35-3	boric acid	2.5-10%
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***Non- Hazardous Components**

CAS: 7732-18-5	PURIFIED WATER	50-100%
CAS: 64-17-5	ethyl alcohol	<0.1%
CAS: 100-02-7	4-nitrophenol	≤2.5%
CAS: 76-60-8	bromocresol green	≤2.5%
CAS: 2611-82-7	Ponceau 4 R	≤2.5%

4 First-aid measures

Description of first aid measures**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.

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*Advice for firefighters

*Protective equipment: No special measures required.

6 Accidental release measures

*Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

*Environmental precautions: 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

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: 10043-35-3	boric acid	6 mg/m ³
CAS: 64-17-5	ethyl alcohol	1,800 ppm
CAS: 100-02-7	4-nitrophenol	0.69 mg/m ³
CAS: 76-60-8	bromocresol green	13 mg/m ³
CAS: 1310-73-2	sodium hydroxide	0.5 mg/m ³

*PAC-2:

CAS: 10043-35-3	boric acid	23 mg/m ³
CAS: 64-17-5	ethyl alcohol	3300* ppm
CAS: 100-02-7	4-nitrophenol	7.6 mg/m ³
CAS: 76-60-8	bromocresol green	140 mg/m ³
CAS: 1310-73-2	sodium hydroxide	5 mg/m ³

*PAC-3:

CAS: 10043-35-3	boric acid	830 mg/m ³
CAS: 64-17-5	ethyl alcohol	15000* ppm
CAS: 100-02-7	4-nitrophenol	46 mg/m ³
CAS: 76-60-8	bromocresol green	840 mg/m ³
CAS: 1310-73-2	sodium hydroxide	50 mg/m ³

7 Handling and storage

*Handling:

*Precautions for safe handling

Keep receptacles tightly sealed.

No special precautions are necessary if used correctly.

*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.

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8 Exposure controls/personal protection

***Additional information about design of technical systems:** No further data; see section 7.

***Control parameters**

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

CAS: 10043-35-3 boric acid

TLV Short-term value: 6* mg/m³
 Long-term value: 2* mg/m³
 *as inhalable fraction, A4

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

***Exposure controls**

***Personal protective equipment:**

***General protective and hygienic measures:** Wash hands before breaks and at the end of work.

***Breathing equipment:** Suitable respiratory protective device recommended.

***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: According to product specification
***Odor:** Characteristic
***Odor threshold:** Not determined.

***pH-value at 20 °C (68 °F):** 4.65

***Change in condition**

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 100 °C (212 °F)

***Flash point:** Not applicable.

***Flammability:** Not applicable.

***Decomposition temperature:** Not determined.

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*Ignition temperature:	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):	1.01741 g/cm ³ (8.49029 lbs/gal)
*Relative density	Not determined.
*Vapor density	Not determined.
*Evaporation rate	Not determined.
*Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
*Partition coefficient (n-octanol/water):	Not determined.
*Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
*Solvent content:	
Organic solvents:	0.0 %
Water:	96.0 %
Solids content:	4.0 %
*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.

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:**
- *Carcinogenic categories**

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

CAS: 64-17-5 ethyl alcohol

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***NTP (National Toxicology Program)**

None of the ingredients is listed.

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***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:**

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

***Uncleaned packagings:**

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

14 Transport information

***UN-Number**

***DOT, ADR, IMDG, IATA** Void

***UN proper shipping name**

***DOT, IMDG, IATA** Void

***ADR** Void

***ADR** Void

***Transport hazard class(es)**

***DOT, ADR, IMDG, IATA**

***Class** Void

***Packing group**

***DOT, ADR, IMDG, IATA** Void

***Environmental hazards:** Not applicable.

***Special precautions for user** Not applicable.

***Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

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***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: 100-02-7 4-nitrophenol

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

All components have the value ACTIVE.

***Hazardous Air Pollutants**

CAS: 100-02-7 4-nitrophenol

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

None of the ingredients is listed.

***Carcinogenicity categories**

***EPA (Environmental Protection Agency)**

CAS: 10043-35-3 boric acid I (oral)

***TLV (Threshold Limit Value)**

CAS: 10043-35-3 boric acid A4

CAS: 64-17-5 ethyl alcohol A3

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

CAS: 64-17-5 ethyl alcohol 5

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

None of the ingredients is listed.

***GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

***Hazard pictograms**



GHS08

***Signal word Danger**

***Hazard-determining components of labeling:**

boric acid

***Hazard statements**

May damage fertility or the unborn child.

***Precautionary statements**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves/protective clothing/eye protection/face protection.

IF exposed or concerned: Get medical advice/attention.

Store locked up.

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***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.

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** 04/10/2025 / 10

***Abbreviations and acronyms:**

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

Toxic to Reproduction 1B: Reproductive toxicity – Category 1B

**** Data compared to the previous version altered.**