

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Date of issue: 14/08/2015 Revision date: 01/03/2023 Supersedes version of: 20/05/2019 Version: 3.2

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

#### 1.1. Product identifier

Product form : Substance

Trade name : Boric acid, solution 4% AGR

 Chemical name
 : boric acid

 IUPAC name
 : boric acid

 EC Index-No.
 : 005-007-00-2

 EC-No.
 : 233-139-2

 CAS-No.
 : 10043-35-3

 REACH registration No
 : 01-2119486683-25

 Product code
 : BORA-40A

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

#### 1.2.1. Relevant identified uses

Main use category : Laboratory use
Use of the substance/mixture : Use in laboratories

#### 1.2.2. Uses advised against

No additional information available

## 1.3. Details of the supplier of the safety data sheet

labbox labware s.l.

Migjorn, 1

P.O. Box Barcelona (SPAIN)

08338 Premia de Dalt - SPAIN

ES

T +34 937 07 79 70 - F +34 937 909 532 info@labbox.com - www.labbox.com

#### 1.4. Emergency telephone number

Emergency number : +34 937 077 970 (For technical information\_Office Hours) In case of medical emergency

phone 112 or to your local emergency number.

H360FD

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	

## **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

## Classification according to Regulation (EC) No. 1272/2008 [CLP]

Reproductive toxicity, Category 1B

Full text of H and EUH statements: see section 16

Specific concentration limits:

(5,5 ≤C < 100) Repr. 1B, H360

#### Adverse physicochemical, human health and environmental effects

No additional information available

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#### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS08

Signal word (CLP) : Danger

Hazard statements (CLP) : H360FD - May damage fertility. May damage the unborn child.

Precautionary statements (CLP) : P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

P308+P313 - IF exposed or concerned: Get medical advice/attention.

P405 - Store locked up.

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

#### 2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	
Boric acid AGR (10043-35-3)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
	This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

Component		
Boric acid AGR(10043-35-3)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605	

## **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Substance type : Mono-constituent
Name : Boric acid, solution 4%

CAS-No. : 10043-35-3 EC-No. : 233-139-2 EC Index-No. : 005-007-00-2

Name	Product identifier	%
Boric acid AGR substance listed as REACH Candidate	CAS-No.: 10043-35-3 EC-No.: 233-139-2 EC Index-No.: 005-007-00-2	≤ 0,3

#### 3.2. Mixtures

Not applicable

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#### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

First-aid measures general : Get medical advice/attention if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial

respiration if necessary. If you feel unwell, seek medical advice.

First-aid measures after skin contact : When symptoms occur: rinse immediately with plenty of water. Take off contaminated

clothing. If skin irritation or rash occurs: Get medical advice/attention.

: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention if you feel unwell.

: Rinse mouth. Do not induce vomiting. Call a physician immediately.

#### 4.2. Most important symptoms and effects, both acute and delayed

No additional information available

First-aid measures after ingestion

First-aid measures after eye contact

## 4.3. Indication of any immediate medical attention and special treatment needed

Never give anything by mouth to an unconscious person.

## **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Sand. Carbon dioxide. Foam. Dry powder.

Unsuitable extinguishing media : Strong water jet.

## 5.2. Special hazards arising from the substance or mixture

Fire hazard : Non combustible.

#### 5.3. Advice for firefighters

Precautionary measures fire : Stop leak if safe to do so.

Firefighting instructions : Exercise caution when fighting any chemical fire.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Absorb spillage to prevent material damage.

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Do not breathe vapours.

## **6.1.2. For emergency responders**

No additional information available

## **6.2. Environmental precautions**

Prevent entry to sewers and public waters.

#### 6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material. Absorb spillage to prevent material damage.

#### 6.4. Reference to other sections

See Heading 8. For further information refer to section 13.

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## **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work.

## 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking. Store in a well-ventilated place. Keep container tightly closed.

Storage area : Keep container tight closed. Store in a dry area. Store in a well-ventilated place. Labelling.

Special rules on packaging : Keep only in original container. Store in a closed container.

## 7.3. Specific end use(s)

Laboratory chemicals.

## **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

## 8.1.1 National occupational exposure and biological limit values

Boric acid, solution 4% AGR (10043-35-3)		
Germany - Occupational Exposure Limits (TRGS 900)		
Local name	Borsäure und Natriumborate	
AGW (OEL TWA) [1]	0,5 mg/m³ (E)	
Limitation of exposure peaks	2(I)	
Remark	AGS;Y;10	
Regulatory reference	TRGS900	
Portugal - Occupational Exposure Limits		
Local name	Boratos, compostos inorgânicos	
OEL TWA	2 mg/m³ I (Fraçao inalável)	
OEL STEL	6 mg/m³ I (Fraçao inalável)	
Regulatory reference	Norma Portuguesa NP 1796:2014	
Spain - Occupational Exposure Limits		
Local name	Ácido bórico	
VLA-ED (OEL TWA) [1]	2 mg/m³	
VLA-EC (OEL STEL)	6 mg/m³	
Remark	TR1B (Cuando las pruebas utilizadas para la clasificación procedan principalmente de datos en animales), s (Esta sustancia tiene prohibida total o parcialmente su comercialización y uso como fitosanitario y/o como biocida. Para una información detallada acerca de las prohibiciones consúltese: Base de datos de productos biocidas: http://www.msssi.gob.es/ciudadanos/productos.do?tipo=plaguicidas Base de datos de productos fitosanitarios http://www.magrama.gob.es/agricultura/pags/fitos/registro/fichas/pdf/Lista_sa.pdf), r (Esta sustancia tiene establecidas restricciones a la fabricación, la comercialización o el uso en los términos especificados en el "Reglamento (CE) nº 1907/2006 sobre Registro, Evaluación, Autorización y Restricción de sustancias y preparados químicos" (REACH) de 18 de diciembre de 2006 (DOUE L 369 de 30 de diciembre de 2006). Las restricciones de una sustancia pueden aplicarse a todos los usos o sólo a usos concretos. El anexo XVII del Reglamento REACH contiene la lista de todas las sustancias restringidas y especifica los usos que se han restringido).	

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Boric acid, solution 4% AGR (10043-35-3)		
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2019. INSHT	
Boric acid AGR (10043-35-3)		
Germany - Occupational Exposure Limits (TRGS 900)		
Local name	Borsäure und Natriumborate	
AGW (OEL TWA) [1]	0,5 mg/m³ E (mg/m3)	
Remark	AGS,Y,10	
Portugal - Occupational Exposure Limits		
Local name	Boratos, compostos inorgânicos	
OEL TWA	2 mg/m³ I (Fraçao inalável)	
OEL STEL	6 mg/m³ I (Fraçao inalável)	
Spain - Occupational Exposure Limits		
Local name	Ácido bórico	
VLA-ED (OEL TWA) [1]	2 mg/m³	
VLA-EC (OEL STEL)	6 mg/m³	
Remark	TR1B (Cuando las pruebas utilizadas para la clasificación procedan principalmente de datos en animales), s (Esta sustancia tiene prohibida total o parcialmente su comercialización y uso como fitosanitario y/o como biocida. Para una información detallada acerca de las prohibiciones consúltese: Base de datos de productos biocidas: http://www.msssi.gob.es/ciudadanos/productos.do?tipo=plaguicidas Base de datos de productos fitosanitarios http://www.magrama.gob.es/agricultura/pags/fitos/registro/fichas/pdf/Lista_sa.pdf).	

## 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

Boric acid, solution 4% AGR (10043-35-3)		
DNEL/DMEL (Workers)		
Long-term - systemic effects, dermal	392 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	8,3 mg/m³	
DNEL/DMEL (General population)		
Acute - systemic effects, oral	0,98 mg/kg bodyweight/day	
Long-term - systemic effects,oral	0,98 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	4,15 mg/m³	
Long-term - systemic effects, dermal	196 mg/kg bodyweight/day	
PNEC (Water)		
PNEC aqua (freshwater)	2,9 mg/l	
PNEC aqua (marine water)	2,9 mg/l	
PNEC aqua (intermittent, freshwater)	13,7 mg/l	
PNEC (Soil)		
PNEC soil	5,7 mg/kg dwt	

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Boric acid, solution 4% AGR (10043-35-3)	
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l

#### 8.1.5. Control banding

No additional information available

## 8.2. Exposure controls

## 8.2.1. Appropriate engineering controls

No additional information available

#### 8.2.2. Personal protection equipment

#### Personal protective equipment:

Avoid all unnecessary exposure. EN 374.

## Personal protective equipment symbol(s):







#### 8.2.2.1. Eye and face protection

#### Eye protection:

Safety glasses

#### 8.2.2.2. Skin protection

## Skin and body protection:

Wear suitable protective clothing

## Hand protection:

Protective gloves against chemicals (EN 374)

#### 8.2.2.3. Respiratory protection

## Respiratory protection:

Wear appropriate mask

#### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

No additional information available

## **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Physical state : Liquid Colour Colourless. Molecular mass 61,83 g/mol Odour Not available Odour threshold Not available Melting point Not available Freezing point Not available Boiling point : Not available Flammability : Not available Explosive limits : Not available Lower explosion limit : Not available Upper explosion limit : Not available Flash point : Not available Auto-ignition temperature : Not available

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Decomposition temperature : Not available рΗ : Not available Not available Viscosity, kinematic Solubility Not available Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure Not available Vapour pressure at 50 °C Not available Density : Not available : 1,005 20° C Relative density Relative vapour density at 20 °C : Not available Particle characteristics : Not applicable

#### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

No additional information available

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Stable in use and storage conditions as recommended in item 7.

## 10.2. Chemical stability

Stable under normal conditions of use.

## 10.3. Possibility of hazardous reactions

No additional information available

## 10.4. Conditions to avoid

Overheating.

## 10.5. Incompatible materials

No additional information available

## 10.6. Hazardous decomposition products

No additional information available

## **SECTION 11: Toxicological information**

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Boric acid, solution 4% AGR (10043-35-3)	
LD50 oral rat	> 2600 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Guideline: EU Method B.1 (Acute Toxicity (Oral))
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: other:FIFRA (40 CFR 163)
LC50 inhalation rat (mg/l)	> 2,12 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: other:USEPA FIFRA 40 CFR Part 160

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Boric acid AGR (10043-35-3)		
LD50 oral rat	> 2600 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Guideline: EU Method B.1 (Acute Toxicity (Oral))	
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: other:FIFRA (40 CFR 163)	
LC50 inhalation rat (mg/l)	> 2,12 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: other:USEPA FIFRA 40 CFR Part 160	
Skin corrosion/irritation	: Not classified	
Boric acid AGR (10043-35-3)		
pH	5,1 (1% 20° C)	
Serious eye damage/irritation	: Not classified	
Boric acid AGR (10043-35-3)		
рН	5,1 (1% 20° C)	
Respiratory or skin sensitisation	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: May damage fertility. May damage the unborn child.	
STOT-single exposure	: Not classified	
STOT-repeated exposure	: Not classified	
Aspiration hazard	: Not classified	

## 11.2. Information on other hazards

No additional information available

## **SECTION 12: Ecological information**

## 12.1. Toxicity

 $\label{thm:local_equation} \mbox{Hazardous to the aquatic environment, short-term}$ 

(acute)

: Not classified

Hazardous to the aquatic environment, long-term

(chronic)

: Not classified

Boric acid, solution 4% AGR (10043-35-3)		
NOEC chronic fish	6,4 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '34 d'	
Boric acid AGR (10043-35-3)		
LC50 - Fish [1]	79,7 mg/l Test organisms (species): Pimephales promelas	
LC50 - Fish [2]	74 mg/l Test organisms (species): Limanda limanda	
EC50 72h - Algae [1]	66 mg/l Test organisms (species): Phaeodactylum tricornutum	
EC50 72h - Algae [2]	54 mg/l Test organisms (species): Phaeodactylum tricornutum	
NOEC chronic fish	6,4 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '34 d'	

## 12.2. Persistence and degradability

No additional information available

## 12.3. Bioaccumulative potential

Boric acid AGR (10043-35-3)	
Partition coefficient n-octanol/water (Log Pow)	-0,757

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## 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

## **Boric acid, solution 4% AGR (10043-35-3)**

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

#### Component

Boric acid AGR (10043-35-3)

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

#### 12.6. Endocrine disrupting properties

No additional information available

#### 12.7. Other adverse effects

No additional information available

## **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Waste treatment methods : Must follow special treatment according to local regulation.

## **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / ADN / RID

## 14.1. UN number or ID number

UN-No. (ADR) : Not regulated UN-No. (IMDG) : Not regulated UN-No. (IATA) : Not regulated UN-No. (ADN) : Not regulated UN-No. (RID) : Not regulated

## 14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not regulated Proper Shipping Name (IMDG) : Not regulated Proper Shipping Name (IATA) : Not regulated Proper Shipping Name (ADN) : Not regulated Proper Shipping Name (RID) : Not regulated

## 14.3. Transport hazard class(es)

## ADR

Transport hazard class(es) (ADR) : Not regulated

**IMDG** 

Transport hazard class(es) (IMDG) : Not regulated

IATA

Transport hazard class(es) (IATA) : Not regulated

ADN

Transport hazard class(es) (ADN) : Not regulated

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RID

Transport hazard class(es) (RID) : Not regulated

#### 14.4. Packing group

Packing group (ADR) : Not regulated Packing group (IMDG) : Not regulated Packing group (IATA) : Not regulated Packing group (ADN) : Not regulated Packing group (RID) : Not regulated

#### 14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

## 14.6. Special precautions for user

#### **Overland transport**

Not regulated

#### Transport by sea

Not regulated

#### Air transport

Not regulated

#### Inland waterway transport

Not regulated

#### Rail transport

Not regulated

## 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## **SECTION 15: Regulatory information**

## 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

## 15.1.1. EU-Regulations

#### **REACH Annex XVII (Restriction List)**

EU restriction list (REACH Annex XVII)	
Reference code	Applicable on
3.	Boric acid, solution 4% AGR
30.	Boric acid AGR; Boric acid, solution 4% AGR

#### **REACH Annex XIV (Authorisation List)**

Boric acid, solution 4% AGR is not on the REACH Annex XIV List

#### **REACH Candidate List (SVHC)**

Boric acid is on the REACH Candidate List

Contains a substance on the REACH candidate list in concentration ≥ 0.1% or with a lower specific limit: Boric acid (EC 233-139-2, CAS 10043-35-3)

#### **PIC Regulation (Prior Informed Consent)**

Boric acid, solution 4% AGR is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals.

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#### **POP Regulation (Persistent Organic Pollutants)**

Boric acid, solution 4% AGR is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

#### Ozone Regulation (1005/2009)

Boric acid, solution 4% is not subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

## **Explosives Precursors Regulation (2019/1148)**

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

#### **Drug Precursors Regulation (273/2004)**

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

#### 15.1.2. National regulations

#### Germany

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (KBwS-Beschluss; ID No. 315).

Chemicals Prohibition Ordinance (ChemVerbotsV) : This product is subject to ChemVerbotsV Annex 2 Entry 1. The following requirements must

be observed: authorization requirement (according to § 6 paragraph 1 sentence 1), basic requirements for carrying out the delivery (according to § 8 paragraph 1, 3 and 4), identification and documentation (according to § 9 paragraph 1 to 3) and exclusion of the

shipping route (according to § 10).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

#### **Netherlands**

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed NIET-limitatieve lijst van voor de voortplanting : The substance is not listed

giftige stoffen – Borstvoeding

NIET-limitatieve lijst van voor de voortplanting : Boric acid, solution 4% is listed

giftige stoffen – Vruchtbaarheid
NIET-limitatieve lijst van voor de voortplanting : Boric acid, solution 4% is listed

giftige stoffen – Ontwikkeling

grage storion - Charactering

#### **Denmark**

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

Pregnant/breastfeeding women working with the product must not be in direct contact with the product

#### 15.2. Chemical safety assessment

No additional information available

## **SECTION 16: Other information**

Full text of H- and EUH-statements:	
H360	May damage fertility or the unborn child.
H360FD	May damage fertility. May damage the unborn child.
Repr. 1B	Reproductive toxicity, Category 1B

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.