

#### SAFETY DATA SHEET

According to Regulation (EC) 1907/2006

FDS. 44 EN Rev. nº 2

Date: 15.12.2015 Page 1 de 5

# 1-Identification of the substance/preparation and of the company or firm

1.1 Identification of the substance or preparation

Boric acid

Synonym: Boracic Acid, ortho-Boric Acid

REACH Registration Number: 01-2119486683-25-XXXX

# 1.2 Use of the substance/preparation:

For laboratory utilization, analysis, research and fine chemistry.

# 1.3 Identification of the company or firm:

DELTALAB, S.L.U. Pol. Ind. La Llana, Plaza Verneda 1, (08191) Rubí (Barcelona) Spain. Telf. (+34) 93 6995000

# 1.4 Emergency telephone:

Emergencies: Single telephone number for emergency calls: 112 (UE) Intoxication: Instituto Nacional de Toxicología (Madrid) tel: (+34)915620420

# 2- Identification of dangers

Classification Regulation (CE) nº 1272/2008.

Repr. 1B

# **Hazard Pictograms**



### Signal word

Danger

#### **Hazard statements**

H360FD May damage fertility. May damage the unborn child.

### **Precautionary statements**

P201 Obtain special instructions before use.

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

P281 Use personal protective equipment as required.

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

P405 Store locked up.

P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.

## Classification (67/548/CEE or 1999/45/CE).

T Toxic



### **SAFETY DATA SHEET**

According to Regulation (EC) 1907/2006

FDS. 44 EN Rev. nº 2

Date: 15.12.2015 Page 2 de 5

R60, R61

For the full text of the R-phrases mentioned in this section, see section 16.

# 3- Component Composition/Information

**Boric Acid** 

CAS [10043-35-3]

EC Number (EINECS): 233-139-2. Formula: H3BO3 M.=61,83 EC index number: 005-007-00-2

REACH Registration Number: 01-2119486683-25-XXXX

#### 4- First aid

### 4.1 General indications:

In the event sickness persists, seek medical assistance.

## 4.2 Inhaling:

Take the person out into the fresh air. May cause respiratory irritation.

### 4.3 Contact with the skin:

Wash with plenty of water.

# 4.4 Eyes:

In the event of irritation, seek medical assistance.

# 4.5 Swallowing:

Wash mouth out immediately. In the event of sickness, seek medical assistance.

### 5- Fire-fighting means

## 5.1 Suitable fire-extinguishing means:

As appropriate to the environment.

# 5.2 Fire-fighting means which must NOT be used

\_\_\_\_

### 5.3 Special risks:

Incombustible. Do not allow extinguishing water into surface or underground water courses

### **5.4 Protective equipment:**

Suitable clothing and footwear.

## 6- Measures to be taken in the event of accidental spillage

### 6.1 Individual precautions:

Do not inhale the dust

## 6.2 Precautions for care of the environment:

Do not allow it to enter the drainage system. Avoid pollution of the soil, water supplies and drains.

# 6.3 Methods for collection/cleaning:



### **SAFETY DATA SHEET**

According to Regulation (EC) 1907/2006

FDS. 44 EN Rev. nº 2

Date: 15.12.2015 Page 3 de 5

Collect up dry. Clean any remains with plenty of water.

## 7- Handling and storage

7.1 Handling:

--

# 7.2 Storage:

Well sealed containers. Dry atmosphere. Atmospheric temperature.

# 8- Staff exposure/protection controls

# 8.1 Technical protective measures:

Ensure good ventilation and renewal of the air in the premises.

## 8.2 Exposure limit control:

\_\_\_

# 8.3 Respiratory protection:

If dust forms, use suitable respiratory protection

# 8.4 Hand protection:

Use suitable gloves (nitrile)

## 8.5 Eye protection:

Use suitable glasses

## 8.6 Individual hygiene measures:

Use suitable clothing. Wash hands before breaks and when the job is done.

## 8.7 Environmental exposure controls:

Fulfill the commitments under local environmental protection legislation.

The supplier of the protection equipment must specify the type of protection to be worn when handling the substance or preparation, including the type of material and the breakthrough time of the material, with regard to the amount and duration of exposure.

# 9- Physical and chemical properties

Appearance: White solid.

Odour: Odourless pH: 4 (30 g/l)

Melting point/freezing point: 171 °C

Flash point: It not flashes Relative density: (20/4) 1,44 Solubility: 50 g/l in water at 20°C

### 10- Stability and reactivity

## 10.1 Conditions which should be avoided:

By reacting with strong reducing agents such as metal hydrides or alkali metals will generate hydrogen gas which could cause a hazard of explosion.



### **SAFETY DATA SHEET**

According to Regulation (EC) 1907/2006

FDS, 44 EN Rev. nº 2

Date: 15.12.2015 Page 4 de 5

### 10.2 Matter which should be avoided:

May be corrosive to metals.

10.3 Hazardous decomposition products:

# **10.4 Complementary information:**

Is a stable product but by heating the product loses water to form metaboric acid (HBO2) first and if heating continue is converted into boric oxide (B2O3).

# 11- Toxicological information

# 11.1 Acute toxicity:

LD50 oral rat: 2.660 mg/kg LD50 skn rbt : > 2.000 mg/kg

LC50 inh rat :>2.0 mg/l 28 mg/m3 4h 11.2 Dangerous effects for health:

Epidemiological studies in humans do not show an increase in lung disease in working populations with continued exposure to the substance. Epidemiological studies in humans suggest that do not cause effects on fertility in working populations with continued exposure to dust and indicate an effect on the general population with high exposure in the environment. Reproduction and Growth: Studies of administration of high doses of food in animals such as rats, mice and dogs demonstrated effects on fertility and testes. Studies in rats, mice and rabbits have shown that high doses have effects on the fetus developing, including fetal weight loss and minor variations in the skeleton. The lowest NOAEL is 9.6 mg B / kg in rats, as the effects of development. The doses were equivalent to several times over the amount at which a human could normally be exposed. Carcinogenic or mutagenic effects: No evidence of carcinogenicity in mice. There has been no mutagenic activity of boric acid in a series of tests of short-term mutation.

### 12- Environmental information

### 12.1 Toxicity:

Algae (Scenedesmus sp) EC10 24 mg B/I (96h) (B4Na2O7)

Crustaceans (Daphnia magna) LC50 133 mg B/I (48h) (H3BO3)

Fish (Limanda Limanda) LC50 74 mg B/I (96h) (B4Na2O7)

Fish (Oncorhynclus mykiss) (embriolarval Stage) LC50 150 mg B/l (24d) (H3BO3)

Fish (Oncorhynclus mykiss) (embriolarval Stage) LC50 100 mg B/I (32d) (H3BO3)

Fish (Carassius auratus) LC50 46 mg B/I (7d) (H3BO3)

Fish (Carassius auratus) LC50 178 mg B/I (3d) (H3BO3)

### 12.2 Persistence and Degradability:

Data not available.

### 12.3 Bioaccumulative potential:

 $log Pow = 0.757 (25^{\circ}C)$ 

Bioaccumulable product.

## 12.4 Mobility in soil:

Data not available.

### 12.5 Assessment PBT and MPMB:



### **SAFETY DATA SHEET**

According to Regulation (EC) 1907/2006

FDS. 44 EN Rev. nº 2

Date: 15.12.2015 Page 5 de 5

Data not available.

## 12.6 Other possible effects on the environment:

Do not allow it to enter soils or water channels.

# 13- Considerations regarding elimination

# 13.1 Substance or preparation:

In the European Union, there are no homogeneous standards established for elimination of chemical waste, which is waste of a special nature, and treatment and elimination of same is subject to the domestic legislation in each country. In view of this, in each case, you should contact the competent authority or those companies legally authorized for elimination of waste.

2001/573/EC: Council Decision of 23 July 2001 amending Commission Decision 2000/532/EC as regards the list of wastes.

Council Directive 91/156/EEC of 18 March 1991 amending Directive 75/442/EEC on waste.

### 13.2 Contaminated containers:

Contaminated containers and packaging of dangerous substances or preparations must be treated in the same manner as the actual products contained in them.

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.

## 14- Information concerning transport

Product not classified as dangerous in transport regulation.

### 15- Mandatory information

## 15.1: Labelling as per REACH

Substance on the Candidate List of Substances of Very High Concern (SVHC) in accordance with Regulation (EC) No 1907/2006 (REACH)

### 16- Other information

Other precautionary statements

## Labelling (65/548/CEE or 1999/45/CE)

## R-phrase(s):

R60, R61 May impair fertility., May cause harm to the unborn child.

# S-phrase(s):

S45, S53 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)., Avoid exposure - obtain special instructions before use.

The information included in this Safety Data Sheet is based on our most up-to-date knowledge, and is solely intended to inform regarding aspects of safety; the properties and characteristics indicated herein are not guaranteed.

PR 05/04 Rev.1