

REGULATOR

SAFETY DATA SHEET

Conforms to Regulation (EC) n°1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SECTION 1. Identification of the substance/mixture and of the company/enterprise

1.1 Product identifier

Product name : **REGULATOR**
Product code : REG
Product type : Micronutrient –enriched fertilizer

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

1.2.1 Relevant identified uses

Main use category : Industrial, professional use
Use of the substance / mixture : Agricultural industry

Function or category of use : Fertiliser [PC12]

1.2.2 Uses advised against

No additional information available.

1.3 Details of the supplier of the safety data sheets

1.3.1 Address of the manufacturer / supplier

IB.ECO B.V.
Industrieterrein De Horsel
Daelderweg 22
6361 HK NUTH
Netherlands
Phone : +31 (0)45 5778305 - Fax : +31 (0)45 5778306
Website : www.ibeco.nl

1.3.2 E-mail address of the person responsible for this SDS

info@ibeco.nl

1.4 Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Remark
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA Belfast	0344 892 0111	Only for the purpose of informing medical personnel in cases of acute intoxications
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	Only for the purpose of informing medical personnel in cases of acute intoxications

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SECTION 2. Hazards identification

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No. 1272/2008 (CLP)

Classification : Not classified.

2.1.2 Physicochemical effects, human health & the environment

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2 Label elements

2.2.1 Labelling in accordance with Regulation (EC) n°1272/2008 (CLP)



Hazard pictograms :

Signal word : GHS07

Hazard statements : H314 – Causes severe skin burns and eye damage.

2.2.2 Precautionary statements

Prevention : P101 – If medical advice is needed, have product container or label at hand.
: P102 – Keep out of reach of children.
: P260 – Do not breathe dust/fume/gas/mist/vapours/spray.
: P264 – Wash ... thoroughly after handling.
: P273 – Avoid release to the environment.
: P280 – Wear protective gloves/protective clothing/eye protection/face protection.
: P301 + P330 + P331 – IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
: P304 + P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
: P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
: P501 – Dispose of contents/container according to local regulations

Response : Non applicable

2.3 Other Hazards

2.3.1 Adverse physicochemical, human health and environmental effects

Causes severe skin burns and eye damage

2.3.2 Substance/mixture meets the criteria for PBT according to Regulation (EC) No 1907/2006, Annex XIII

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

2.3.3 Substance/mixture meets the criteria for vPvB according to Regulation (EC) No 1907/2006, Annex XIII

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

2.3.4 Other hazards which do not give rise to a classification

Non applicable

SECTION 3. Composition / information on ingredients

3.1 Substances

Non applicable.

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3.2 Mixtures

Name	Identifiers	%	Classification according to Regulation (EC) No. 1272/2008
* Boric acid <i>Substance listed as REACH Candidate</i>	(n°CAS) : 10043-35-3 (n°EC) : 233-139-2 (n°EC Index) : 005-007-00-2 (REACH n°) : 01-2119486683-25	0.1-1	Repr.1B, H360FD

Name	Identifiers		Specific concentration limits
* Boric acid	(n°CAS) : 10043-35-3 (n°EC) : 233-139-2 (n°EC Index) : 005-007-00-2 (REACH n°) : 01-2119486683-25		(C >= 5,5) Repr. 1B, H360FD

SECTION 4. First aid measures

4.1 Description of first aid measures

- First-aid measures general

: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
- First-aid measures after skin contact

: Remove contaminated clothes. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact

: Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion

: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after skin contact

: Repeated or prolonged contact may cause skin irritation.
- Symptoms/injuries after eye contact

: May cause eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5. Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media

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

: Do not use a heavy water stream

5.2 Special hazards arising from the substance or mixture

- Fire hazard

: Presents no particular fire or explosion hazard.
- Hazardous decomposition products in case of fire

: Carbon oxides (CO, CO2). For further information, refer to section 10 : "Stability and Reactivity".

5.3 Advice for firefighters

- Firefighting instructions

: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent firefighting water from entering the environment.

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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

- 6.1.1 For non-emergency personnel** : Evacuate unnecessary personnel.
- 6.1.2 For emergency responders** : Ventilate area. Equip clean-up crew with proper protection.
For further information refer to section 8 : " Exposure-controls/personal protection".

6.2 Environmental precautions

Do not allow to enter drains or water courses.

6.3 Methods and material for containment and cleaning up

- 6.3.1 For containment** : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
- 6.3.2 Cleaning procedure(s)** : Take up liquid spill into absorbent material. Sweep or shovel spills into appropriate container for disposal.
- 6.3.3. Other information** : Dispose of materials or solid residues at an authorized site.

6.4 Reference to other sections

For further information refer to section 8 : " Exposure-controls/personal protection". Concerning disposal elimination after cleaning, see section 13.

SECTION 7. Handling and storage

7.1 Precautions for safe handling

- Precautions for safe handling** : Concerning personal protective equipment to use, see item 8. Provide good ventilation in process area to prevent formation of vapor.
- Hygiene measures** : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2 Conditions for safe storage, including any incompatibilities

- Storage conditions** : Keep only in the original container in a cool well ventilated place. Keep container closed when not in use.
- Incompatible products** : Strong bases. Strong oxidation agent.
- Heat and ignition sources** : Keep away from heat and direct sunlight.

7.3 Specific end use(s)

No additional information available.

SECTION 8. Exposure control / individual protection

8.1 Control parameters

No additional information available.

8.2 Exposure controls

8.2.1 Exposure controls

If user operations generate dust, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Care for eyewash stations and security showers at the workplace.

Version : 2.1

EN (English)

Date of issue : 01/01/2018
(4 / 9)

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8.2.2 Personal protection equipment / Health measures

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear suitable gloves resistant to chemical penetration. Chemical resistant gloves (according to European standard NF EN 374 or equivalent)

Eye protection:

Safety glasses. DIN EN 166

Skin and body protection:

Wear suitable protective clothing. CEN : EN 340; EN 369; EN 465. EN 13034

Respiratory protection:

No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation. In case of inadequate ventilation wear respiratory protection. EN 143

Environmental exposure controls:

Avoid release to the environment.

Other information:

Do not eat, drink or smoke during use.

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical and chemical properties	Value
State of matter	Liquid
Colour	Slightly yellow
Odour	Characteristic neutral
Odour treshold	No data available
pH	< 1
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	Not determined
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	Irrelevant
Vapour pressure (at ...°C)	No data available
Vapour density (at ...°C)	No data available
Relative density (at ...°C)	No data available
Water Solubility	No data available
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

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9.2 Other information

No data available.

SECTION 10. Stability and reactivity

10.1 Reactivity

The product is stable under normal conditions of use and storage

10.2 Chemical stability

The product is stable under normal conditions of use and storage

10.3 Possibility of hazardous reactions

There are no dangerous reactions known.

10.4 Conditions to avoid

Keep away from heat and direct sunlight.

10.5 Incompatible materials

Keep substance away from strong bases. Strong oxidizing agents.

10.6 Hazardous decomposition products

Combustion generates : Carbon oxides (CO, CO2)

SECTION 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity : Not classified

boric acid (10043-35-3)	
LD50 oral rat	3500 - 4100 mg/kg
LD50 dermal rat	> 2000 mg/kg/d
LC50 inhalation rat (mg/l)	2 mg/l

Skin corrosion/irritation : Not classified
pH: < 1

Serious eye damage/irritation : Not classified
pH: < 1

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

SECTION 12. Ecological information

12.1 Toxicity

boric acid (10043-35-3)	
LC50 fishes 1	74 mg/l Limanda limanda
EC50 Daphnia 1	133 mg/l

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12.2 Persistence and degradability

No additional information available.

12.3 Bioaccumulative potential

boric acid (10043-35-3)	
Log Pow	0,757 25°C
Bioaccumulative potential	No indication of bio-accumulation potential.

12.4 Mobility in soil

No additional data available.

12.5 Results of PBT and vPvB assessment

Siliforce-2-B-Mo	
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 (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 Other adverse effects

Avoid release to the environment.

SECTION 13. Disposal considerations

13.1 Waste treatment methods

Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Additional information	: Empty containers should be taken for recycle, recovery or waste in accordance with local regulation.
Ecology - waste materials	: Avoid release to the environment.

SECTION 14. Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
None	None	None	None	None
14.5. Environmental hazards				
None	None	None	None	None
No supplementary information available				

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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 Transport in bulk according to Annex II of MARPOL and he IBC Code

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

Contains no REACH substances with Annex XVII restrictions.
Contains a substance on the REACH candidate list in concentration $\geq 0.1\%$ or with a lower specific limit: Boric acid (EC 233-139-2, CAS 10043-35-3)

Contains no REACH Annex XIV substances

15.1.2 National regulations

No additional information available

15.2 Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16. Other information

16.1 Indication of changes

Version	: 2.1
Date of revision	: 01/01/2018
Date of issue	: 01/01/2018
Replaces version	: 2.0
Indication of changes	: In accordance with Commission Regulation (EU) n°1907/2006 (REACH), Annex II, modified by regulation (EU) n°2015/830. <ul style="list-style-type: none">- Lay-out- 1.3.1 Address of the manufacturer / supplier- 1.3.2. E-mail address of the person responsible for this SDS
Source	: ECHA Website http://echa.europa.eu/ Information on registered substances

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16.2 Abbreviations and acronyms

- ADN** = European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- ADR** = European Agreement concerning the International Carriage of Dangerous Goods by Road
- CAS** = Chemical Abstracts Service
- CLP** = Classification, Labelling and Packaging
- EC** = European Community
- EN** = European Norm
- EUH** = European Hazard Statement
- GHS** = Globally Harmonised System of Classification and Labelling of Chemicals
- IATA** = International Air Transport Association
- IMDG** = International Maritime Dangerous Goods
- MARPOL 73/78** = Marine Pollution, the International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978
- PBT** = Persistent, Bioaccumulative, Toxic
- REACH** = Registration, Evaluation and Autorisation of Chemicals
- RID** = Regulations concerning the International Carriage of Dangerous Goods by Rail
- RRN** = REACH Registration Number
- STEL** = Short Term Exposure Limit
- TWA** = Time weighted Average
- TLM** = Tolerance Limit Median
- vPvB** = very Persistent, very Bioaccumulative.

16.3 Relevant R-phrases and/or H statements

- Skin Corr. 1A – Skin corrosion/irritation, Category 1A
- H314 – Causes severe skin burns and eye damage.
- P101 – If medical advice is needed, have product container or label at hand.
- P102 – Keep out of reach of children.
- P260 – Do not breathe dust/fume/gas/mist/vapours/spray.
- P264 – Wash ... thoroughly after handling.
- P273 – Avoid release to the environment.
- P280 – Wear protective gloves/protective clothing/eye protection/face protection.
- P301 + P330 + P331 – IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
- P304 + P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P501 – Dispose of contents/container according to local regulations

16.4 Training advice

The staff handling this product, must be informed of the precautionary recommended measures and should have access to this information.

16.5 Further information

The information in this Safety Data Form is given in good faith and belief in its accuracy based on our knowledge of the substance/preparation concerned at the date of publication. It does not imply the acceptance of any legal liability or responsibility whatsoever by IBECO B.V. for the consequences of its use or misuse in any particular circumstances. In no case does this dispense the user of the product from compliance with all laws, decrees and regulations existing relative to the product and to health and hygiene and work safety standards. Drawn up according to the provisions of form EFMA (European Fertilizer Manufacturers' Association), and according to ECHA.