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SAFETY DATA SHEET - CLEANER -

1. Identification of the substance

- 1.1 Trade name : - CLEANER
- Description of the substance : - Sodiumperborate - trihydrate (pure)
- 1.2 Identification according to regulation 1272/2008 : - EG Catalog number: - 005-018-00-2
 Int. Chem. identification: - Perboric acid, monosodium salt, trihydrate
 CAS No.: - 13517-20-9
 EG No.: - 239-172-9
 Molecule formula: - NaBO₂ · H₂O₂ · 3H₂O
- 1.3 Intended use : - Removal of coffee and tea stains by the professional user in the hotel and catering industry. Use only by capable authorized persons.
- 1.4 Supplied by : - Bravilor Bonamat B.V.
 ~ Address - Pascalstraat 20, NL-1704 RD Heerhugowaard, The Netherlands
 ~ Postal address - Postbus 188, NL-1700 AD Heerhugowaard, The Netherlands
 Telephone and Fax : - Tel. +31 (0)72 5751751; Fax. +31 (0)72 5751758
 E-mail : - info@bravilor.com
 Website : - www.bravilor.com
 Represented in the UK by : - Bravilor Ltd.
 ~ Address - Unit15 Cordwallis Park, Clivemont Road,
 Maidenhead, Berkshire SL6 7BU, United Kingdom.
 Telephone and Fax : - +44 (0)1628 776060; (fax.) +44 (0)1628 776035
 E-mail : - enquiries@bravilor.com

2. Hazards identification

- 2.1 Classification of the substance according to European Regulation 1272/2008
 Toxicity for reproduction category 1B : - (H360Df) - May damage fertility.
 - May damage the unborn child.
 Acute Toxicity category 4 : - (H332) - Harmful if inhaled.
 STOT category SE 3 : - (H335) - May cause respiratory irritation.
 Eye damage category 1 : - (H318) - Causes serious eye damage.
 Signal word : - DANGER.

Classification according to European Directive 67/548/EG (also see paragraph 16.)

- Reproduction : - category 2 (R61)
 - category 3 (R62)

- Hazard symbols : - Xn (R20)
 - Xi (R37-41)

- Signal word : - Toxic

2.2 Labelling elements according to European Regulation 1272/2008

- Hazard symbols : -



GHS07



GHS08



GHS05

- Signal word : - DANGER

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- Hazard statements
H360Df :
: - May damage the unborn child.
: - May damage fertility.
- H318 :
: - Causes serious eye damage.
- H332 :
: - Harmful if inhaled.
- H335 :
: - May cause respiratory irritation.
- Safety instructions.
General
- P101 :
: - If medical advice is needed, have product container or label at hand.
- P102 :
: - Keep out of reach of children.
- For use
- P201 :
: - Obtain special instructions before use.
- P202 :
: - Do not handle until all safety precautions have been read and understood.
- P261 :
: - Avoid breathing dust.
- P271 :
: - Use only outdoors or in a well-ventilated area.
- P280 :
: - Wear protective gloves, eye protection, or face protection.
- P281 :
: - Use personal protective equipment as required.
- Storage precautionary statements
- P405 :
: - Store locked up.
- P403+P233 :
: - Store in a well-ventilated place. Keep container tightly closed.
- Disposal precautionary statements
- P501 :
: - Dispose of contents/package in accordance with local regulations
- Labelling in accordance with Directives 67/458/EG and 1999/45/EG (also see paragraph 16.)
- Hazard symbols :
: - Xi ((R37-41) and Xn (R20)
- Signal word :
: - Toxic
- R-phrases :
: - R20 – R41 – R37 – R61 – R62
- S-phrases :
: - S45 – S47 – S53

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3. Composition and information on the ingredients

Official name	: - Perboric acid, monosodium salt, trihydrate
Registration numbers	: - - 005-018-00-2 ; - 005-018-01-X
Synonym	:
CAS. No.	: - 13517-20-9
EG. No.	: - 239-172-9
MM.	: - 153,86
Molecule formula (Hill)	: - $\text{BNaO}_2 \cdot \text{H}_2\text{O}_2 \cdot 3\text{H}_2\text{O}$
Molecule formula	: - $\text{NaBO}_2 \cdot \text{H}_2\text{O}_2 \cdot 3\text{H}_2\text{O}$

4. First aid measures

4.1 Description of first aid measures (Phrases according to EG-Regulation 1272/2008)

IF INHALED: (P304)	: - Remove victim to fresh air and keep at rest in a position comfortable for breathing. (P340)
IF SWALLOWED: (P301)	: - Rinse mouth. (P330)
IF IN EYES: (P305)	: - Rinse cautiously with water for several minutes. (P351) - Remove contact lenses, if present and easy to do. Continue rinsing. (P338) - Immediately call a POISON CENTER or doctor/physician. (P310)
IF exposed or concerned (P308)	: - Get medical advice/attention. (P313) - Call a POISON CENTER or doctor/physician if you feel unwell. (P312)

Other possible first aid measure not mentioned before:

After contact with skin	: - Rinse with plenty of water. - Remove contaminated clothing
After swallowing	: - Make victim drink water (two glasses at the most). - Show package or label to the doctor or medical helper.

4.2 Important symptoms and effects after exposure, acute and delayed:

After eye contact	: - Irritation
After swallowing	: - Irritation of the mucous membrane
The following applies to boron compounds in general	: - Possible symptoms after resorption are: nausea, vomiting, agitation, spasms, CNS disorders, cardiovascular disorders.

5. Fire-fighting measures

5.1 Suitable extinguishing media	: - In adaptation to materials stored in the immediate vicinity
5.2 Special risks	: - Avoid contact with organic materials. - Fire boosting, keep away from combustible materials.
5.3 Special protecting clothing	: - Do not stay in the danger zone without suitable chemical protection clothing and self-contained breathing apparatus
5.4 Further information	: - Non combustible - Prevent fire-fighting water from entering surface water or groundwater

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6. Accidental release measures

- 6.1 Person related precautions : - Avoid direct contact with the substance.
- Avoid generation of dust.
- Do not inhale dust.
- Ensure supply of fresh air in enclosed rooms.
- 6.2 Procedures for cleaning / absorption : - Take up dry.
- Forward for disposal.
- Clean up affected area.
- After handling the material clean contaminated clothing and equipment.
- 6.3 Environmental Protection measures : - Do not allow to enter the sewerage system

7. Handling and storage

- 7.1 Handling : - No further requirements
- 7.2 Storage : - Store in a dry place
- Store in a tightly closed container
- Storage temperature between + 5° and +30° C
- 7.3 Keep away from : - Metals (especially alkaline metals)
- Metallic catalysts

8. Personal Protection / exposure protection

- 8.1 Personal protective equipment:
Respiratory protection : - Required when dusts are generated
Eye protection : - Required
Hand protection : - Required
Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substance handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.
- 8.2 Industrial hygiene : - Change contaminated clothing
- Application of skin-protective barrier cream is recommended
- Don't eat, drink, or smoke while working with the substance
- Wash hands after working with the substance

9. Physical and chemical properties

- Form : - Solid
Colour : - White
Odour : - Odourless
Melting temperature : - ~ 60° C (decomposition)
Boiling temperature : - Not available
Ignition temperature : - Non combustible
Flash point : - Not flammable
Density : - 1730 kg/m³
Bulk density : - ~ 720 kg/m³
Solubility in water : - ~ 23 g/l (20° C)
pH : - 10,1 - 10,4 (at 20° C and 20 g/l_{water})

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10 Stability and reactivity

- 10.1 Conditions to be avoided : - No information available
- 10.2 Substances to be avoided : - Organic combustible substances
- Metals (i.e. alkaline metals)
 - metal catalyst
- 10.3 Hazardous decomposition products : - No information available

11. Toxicological information

- 11.1 Acute Toxicity : - LD50 (Oral rat): 2243 mg/kg
- 11.2 Sub-acute to chronic toxicity : - Sensitization: Sensitization test (guinea pig): no sensitizing effect
- 11.3 Specific symptoms with animal tests : - Eye irritation test: irritant effect
- Skin irritation test: slight irritating effect
- 11.4 Further toxicological information : - After eye contact: irritating effect
- After swallowing: irritation of the mucous membrane
 - The substance is under suspicion that it may damage fertility or that it may damage the unborn child
 - For Boron-compounds in general the following applies: after swallowing nausea and vomiting, irritation, spasms, in general CNS-disorders, heart and circulatory disorders can be expected
- 11.5 Further information : - Further hazardous properties cannot be excluded. The product should be handled and used with due care and attention

12. Ecological information

- 12.1 Biologic degradation : ~ 85%/2 d (for the monohydrate)(closed bottle test)
- 12.2 Biodegradation : - Readily biodegradable
- 12.3 Ecotoxic effects : - No special data available
- 12.4 Biological effects : - Fish toxicity: Leuciscus Idus LC₅₀: 175 mg/l/48h
- Daphniae toxicity: Daphnia Magna: EC₅₀: 133 - 226 mg/l/48h
 - Bacterial toxicity: Psuidomonas Putida EC₅: 290 mg/l
- 12.5 Further ecological data : - Do not allow to enter waters, waste water, or soil.
- When handled and used competently no ecological problems are to be expected

13. Disposal considerations

- 13.1 Product : - There are no uniform EC-regulations for the disposal of chemicals or residues. Chemical residues in general count as special waste, the disposal of which is regulated in the EC member states through harmonised laws and regulations. We recommend that the authorities in charge or an approved disposal company is contacted to advice on how to dispose of this special waste.
- 13.2 Packaging : - Handle contaminated packaging in the same way as the substance itself
- Disposal in compliance with the official national regulations
 - If not specified differently, non contaminated packaging may be treated like household waste or re-cycled.

14. Transport information

Not subject to transport regulations

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15. Regulatory information

- 15.1 Professional considerations : - Take in consideration the regulations given in EU-Directive 94/33/EG on the protection of young people at work.
- 15.2 Further information : - No further regulation are known, given the small quantity per sachet.

16. Additional information

Labelling according to Directive 67/458/EC and 1999/45/EC.

Hazard symbols : -



Symbols: Xi ((R37-41)
Xn (R20)

- Signal word : - TOXIC
- R-phrases (Text according to Directive 1967/ 548 EG)
- R20 : - Harmful by inhalation.
- R37 : - Irritating to respiratory system.
- R41 : - Risk of serious damage to eyes.
- R61 : - May cause harm to the unborn child.
- R62 : - Possible risk of impaired fertility.
- S-phrases
- (S2) : - Keep out of the reach of children
- S45 : - In case of accident or if you feel unwell seek medical advice immediately (show the label where possible).
- S47 : - Keep at temperature not exceeding 50° C.
- S53 : - Avoid exposure - obtain special instructions before use.

This Safety Data Sheet (version 6):

This Safety Data Sheet is completely revised on 10 January 2013 to make it meet the requirements of the European Regulations 1907/2006 concerning the Registration, Evaluation, Authorisation, and Restriction of Chemicals (REACH), and European Regulation 1272/2008 on classification, labelling and packaging of substances and mixtures.

Disclaimer:

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product. The receiver and the users of the product are responsible for a proper use in conformity with the existing legislation and regulations.