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NOVAMARMOL POWDER (HULK)		NOVAMARMOL Powder 001

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

1.1. Product identifier

Trade name **NOVAMARMOL POWDER**

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

Use : Powder to crystallise limestone soils.

1.3. Details of the supplier of the safety data sheet

Company identification : BONASTRE SYSTEM S.L.
C/Comercio 6 Pol. Ind. Comte de Sert
08755 Castellbisbal Barcelona (SPAIN)
Tel: +34 93 772 44 00 Fax: +34 93 772 32 22
E-mail: info@bonastre-system.com

1.4. Emergency telephone number

Emergency phone nr : Orfila (INRS) : 01 45 42 59 59
Paris Poison Control Centre - Hospital Fernand WIDAL Phone: +33 (0) 1 40 05 48 48

SECTION 2 Hazards identification

2.1. Classification of the substance or mixture

This preparation is regulated according to 67/548/EEC and/or 1999/45/EC European Directives, their adaptations and annexes.

Classification EC 67/548 or EC 1999/45

Classification : Xn; R21/22
Xi; R38-41
-Physico-chemical hazards to human health and the environment : R21/22 - Harmful in contact with skin and if swallowed.
R38 - Irritating to skin.
R41 - Risk of serious damage to eyes.

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Hazards identification-CLP **H318 - Causes serious eye damage**
H302 - Harmful if swallowed
H315 - Causes skin irritation
• Health hazards : Acute toxicity, Oral - Category 4 - Warning - (CLP : Acute Tox. 4) - H302
Skin irritation - Category 2 - Warning - (CLP : Skin Irrit. 2) - H315
Serious eye damage - Category 1 - Danger - (CLP : Eye Dam. 1) - H318

2.2. Label elements

Labelling Regulation EC 1272/2008 (CLP)

Obligatory mention labelling

Hazard pictograms

Danger



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SECTION 2 Hazards identification (continued)

Contains	: Oxalic acid - Magnesium hexafluorosilicate
• Hazard pictograms	: GHS05 - GHS07
• Signal words	: Danger
• Hazard statements	: H318 - Causes serious eye damage H302 - Harmful if swallowed H315 - Causes skin irritation
• Precautionary statements	
Prevention	: P264 - Wash face and hands thoroughly after handling. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P270 - Do not eat, drink or smoke when using this product
Response	: P301+310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P330 - Rinse mouth. P302+352 - IF ON SKIN: Wash with plenty of soap and water P332+313 - If skin irritation occurs: Get medical advice/attention P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P310 - Immediately call a POISON CENTER or doctor/physician
Disposal considerations	: P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with the local, regional, national and/or international regulations.

2.3. Other hazards

Other Undesirable human health effects : .

SECTION 3 Composition/information on ingredients

3.2. Mixture

Substance / Mixture : Mixture of abrasive and acid powder

Components : Hazardous components leading to classification or present under classification thresholds:

Substance name	Contents	CAS No	EC No	Annex No	N° Registration	Classification
Oxalic acid dihydrate	: 40 to 50 %	6153-56-6	205-634-3	-----	01-2119534576-33	Xn; R21/22 Xi; R41 ----- Eye Dam. 1; H318 Acute Tox. 4 (Dermal); H312 Acute Tox. 4 (Oral); H302
Sulfur	: 20 to 30 %	7704-34-9	231-722-6	016-094-00-1	01-2119487295-27	Xi; R38 ----- Skin Irrit. 2; H315
Magnesium hexafluorosilicate	: 4 to 6 %	16949-65-8	241-022-2	009-018-00-3	----	T; R25 ----- Acute Tox. 3 (Oral); H301

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SECTION 4 First aid measures

4.1. Description of first aid measures

- Inhalation : . See a doctor if respiratory symptoms appear or persist.
- Skin contact : Flush with plenty of water. Seek medical advice if an irritation appears.
- Eye contact : In case of eye contact, immediately rinse with clean water for 10-15 minutes. Contact ophthalmologist immediately.
- Ingestion : If the person is conscious, rinse mouth with water. Do not induce vomiting without seeking medical advice. Call immediately a physician.

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

See 2.1/2.3

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

No information / data available

SECTION 5 Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Sprayed water with additive, chemical powder, chemical foam, carbon dioxide extinguisher
- Unsuitable extinguishing media : Dense water jet.

5.2. Special hazards arising from the substance or mixture

- Hazardous combustion products** : Combustion can generate toxic gas or smoke such as carbon oxides, sulphur oxides, silica tetrafluoride and magnesium fluoride.

5.3. Advice for firefighters

- Special protective equipment for fire fighters** : Wearing self-contained, insulating breathing equipment is recommended when entering the danger zone.
- Further information :** : Prevent fire-fighting water from entering wastewater.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- Personal precautions** : Do not inhale the powder or dusts

Avoid contact with skin and eyes. Personal protection : see chapter 8.

6.2. Environmental precautions

- Environmental precautions** : Avoid discharge into drinking water supplies, wastewater or soil. Notify authorities if product enters sewers or publicwaters.

6.3. Methods and material for containment and cleaning up

- Clean up methods** : Physically collect the product by sucking and/or sweeping it up and store in suitable containers for disposal. Clean up residues in the contaminated area with plenty of water.

6.4. Reference to other sections

For information on handling, see chapter 7. For information on personal protection equipment, see chapter 8. For information on disposal, see chapter 13.

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SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions in handling : Do not eat or drink at point of use.
Handling : Do not inhale the powder or dusts

Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep the product in its original packing and dry at a temperature above 5°C.
Provide local exhaust or general room ventilation.

7.3. Specific end use(s)

No information / data available

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits : (INRS France (ED 984)) (for oxalic acid anhydride)
Oxalic acid dihydrate : VME - France [mg/m³] : 1

DNE3 values : (for oxalic acid dihydrate)
-Dermal/Worker/short term-local effects: 0.69 mg/cm²
-Dermal/Worker/long term-local effects
-systemic effects: 2.29 mg/kg /day
-Inhalation/Worker/long term
-systemic effects: 4.03 mg/m³
-Dermal/General public/short-term local effects: 0.3

.PNEC values : (for oxalic acid dihydrate)
Fresh water: 0.1622 mg/l
-Sea water: 0.01622 mg/l
-water (intermittent release: 0.1622 mg/l
-STP: 1550 mg/l

8.2. Exposure controls

- **Respiratory protection** : Approved dust or mist respirator should be used if airborne particles are generated when handling this material. Dust / anti-aerosol filter type P3 (according to standard EN 143)

- **Hand protection** : Wear gloves.
Due to the many possible conditions of exposure, the user should consider the actual period of use of a chemical protective glove to be significantly shorter than the period prior to permeation. You must follow the manufacturer's instructions, particularly concerning minimum thickness and minimum period prior to permeation. This information must not replace the compliance tests carried out by the final user. The protection provided by the glove depends on the conditions in which the substance/mix is used.
Use at minimum a pair of chemical-resistant, leak-proof gloves (compliant with the EN 374 standard). The use of this product means that the type of material and thickness of the gloves and the time taken to break down the material used to make the gloves cannot be decided until an in-depth study of the workstation has taken place, leading to a clear definition of the conditions of use and the most accurate possible evaluation. The gloves should therefore be chosen with the advice of the individual protective equipment manufacturer. Neoprene or nitrile rubber gloves (according to standard EN 374).

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SECTION 8 Exposure controls/personal protection (continued)

- Eye protection : Goggles with lateral protection (according to standard EN 166).
- Skin protection : Wear suitable protective clothing under the conditions of use.
Acid resistant clothing
- Technical protective measures : Use in well ventilated place.
- Industrial hygiene : Wash hands after working with the product. Change contaminated clothing and wash it before re-use. Do not eat, drink or smoke in the workplace under any circumstances.

SECTION 9 Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state at 20°C : Coarse powder
- Colour : Green
- Odour : Odourless
- pH value in distilled water : (10g/l) 1.8
- Melting point [°C] : 98 to 100 (for oxalic acid dihydrate)
- Boiling point [°C] : Not applicable
- Flash point [°C] : Not applicable
- Relative evaporation rate : Not applicable.
- Flammability (solid, gas) : Non-combustible.
- Explosion limits : Not applicable.
- Vapour pressure [20°C] : Not applicable.
- Relative vapour density (air=1) : Not applicable
- Bulk density (g/ml) : 1
- Solubility in water : Partially soluble.
- Log P octanol / water at 20°C : Not applicable
- Auto-ignition temperature [°C] : 400 (for oxalic acid dihydrate)
- Decomposition point [°C] : No data available.
- Viscosity : Not applicable
- Characteristic of explosiveness : Inexplosive
- Oxidising properties : non-oxidizing
- Sublimation point [°C] : Circa 160 (for oxalic acid dihydrate)

9.2. Other information

No information / data available

SECTION 10 Stability and reactivity

10.1. Reactivity

No information / data available

10.2. Chemical stability

The product is stable in normal conditions of use

10.3. Possibility of hazardous reactions

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SECTION 10 Stability and reactivity (continued)

Combustion can generate toxic gas or smoke such as carbon oxides, sulphur oxides, silica tetrafluoride and magnesium fluoride.

10.4. Conditions to avoid

Avoid strong heating
Protect from the contact with water or moisture

10.5. Incompatible materials

Oxidizing agents, strong acids, strong bases.
sodium hypochlorite

10.6. Hazardous decomposition products

In event of fire: see Section 5.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

- **Acute toxicity** : Harmful if swallowed
- LD50 (oral, rat) [mg/kg]** : Oxalic acid: Acute oral toxicity: DL50 375 mg/kg (rat) Acute dermal toxicity: DL50 20.000 mg/kg (rabbit)
- ATE oral on the mixture** : Circa 595 mg/kg
- ATE dermal on the mixture** : Circa 2500 mg/kg
- **Serious eye damage/irritation** : Causes serious eye damage
- **Skin corrosion/irritation** : Causes skin irritation
- **Respiratory or skin sensitisation** : To the best of our knowledge (and taking into account its composition) this product is not classified in this hazard category.
- **Germ cell mutagenicity** : To the best of our knowledge (and taking into account its composition) this product is not classified in this hazard category.
- **Carcinogenicity** : To the best of our knowledge (and taking into account its composition) this product is not classified in this hazard category.
- **Reproductive toxicity** : To the best of our knowledge (and taking into account its composition) this product is not classified in this hazard category.
- **STOT-single exposure** : To the best of our knowledge (and taking into account its composition) this product is not classified in this hazard category.
- **STOT-repeated exposure** : To the best of our knowledge (and taking into account its composition) this product is not classified in this hazard category.
- **Aspiration hazard**
- **Information on the likely routes of exposure :**
 - **Inhalation** : .
 - **Eyes contact** : Can provoke irritations with risk of serious lesions if decontamination is not carried out immediatly.
 - **Dermal contact** : Harmful in contact with skin.
- The product can irritate wet skin by partial hydration resulting in a high pH.
 - **Ingestion** : Harmful if swallowed

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SECTION 12 Ecological information

12.1. Toxicity

On product

: No study has been carried out on this mixture for the moment.
 Avoid discharge into drinking water supplies, wastewater or soil.
 Oxalic acid: Toxicity for fish: CL50 160 mg/l (48 h, Carassius auratus (Goldfish)
 Source : Toxicity on Daphnia literature : CE50 162,2 mg/l (48 h, Daphnia magna)
 Method: OECD guideline 02 Toxicity on algae: other 80 mg/l (8 d, Microcystis aeruginosa (freshwater cyanobacteria) Method: other Toxicity on bacteria: other 1.550 mg/l (16 h, Pseudomonas putida) Source: literature

Ecotoxic effects:

: Can have detrimental effects on aquatic organisms at high concentrations because of the pH effect.

12.2. Persistence and degradability

Biodegradability:

: No information available
 Oxalic acid: Biodegradability: 89 % (20 d, DBO5/DCOX100) Easily biodegradable.
 Source: literature Chemical Oxygen Demand (COD): approx. 180 mg/g Source: literature Biochemical Oxygen Demand (DBO5): approx. 160 mg/g Source: literature

12.3. Bioaccumulative potential

No information / data available
 Oxalic acid:
 Considering the low logPow, no bioaccumulation is expected.

12.4. Mobility in soil

No information / data available

12.5. Results of PBT and vPvB assessment

No information / data available
 Oxalic acid: The substance does not fulfil the criteria given in Appendix XIII of EC Regulation 1907/2006 and is not identified as a PBT or vPvB substance.

12.6. Other adverse effects

No information / data available

SECTION 13 Disposal considerations

13.1. Waste treatment methods

General

: Dispose of in accordance with local/national safety regulations

Elimination of the product residues:

: Unused residues of the product must be considered as dangerous waste. They must be neutralised before dumping, or incinerated in a certified installation.

Empty packaging Disposal:

: Eliminate by incineration or salvage the packing for recycling after elimination of the product residues.

SECTION 14 Transport information

General information

The product is not subject to the transport requirements : - by road RID/ADR - by sea IMO/IMDG - by air ICAO/IATA

14.1. UN number

Not classified for transport of Dangerous Goods.

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SECTION 14 Transport information (continued)

14.2. UN proper shipping name

Not classified for transport of Dangerous Goods.

14.3. Transport hazard class(es)

Not classified for transport of Dangerous Goods.

14.4. Packing group

Not classified for transport of Dangerous Goods.

14.5. Environmental hazards

- Marine pollutant : No.

14.6. Special precautions for user

No special precautions (ungraded product transportation)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Non concerned

SECTION 15 Regulatory information

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

Ensure all national/local regulations are observed.

15.2. Chemical safety assessment

No information / data available

SECTION 16 Other information

List of relevant R phrases (heading 3) : R21/22 - Harmful in contact with skin and if swallowed.
R25 : Toxic if swallowed.
R38 - Irritating to skin.
R41 - Risk of serious damage to eyes.

List of relevant H phrases (heading 3) : H301 - Toxic if swallowed
H302 - Harmful if swallowed
H312 - Harmful in contact with skin
H315 - Causes skin irritation
H318 - Causes serious eye damage

Revision : Following major changes, the MSDS has been completely revised.

Origin of key data used : This safety data sheet was produced on the basis of information supplied by the manufacturer.

The contents and format of this SDS are in accordance with the EC Regulation No. 1907/2006 and the EC Regulation No. 453/2010

DISCLAIMER OF LIABILITY:

This safety data sheet does not replace the using technical notice but complete it. The information given above is based on the present state of our knowledge and experience about this product at this version date. It is provided in good faith. Moreover users' attention is drawn on the possible risks incurred if this product is not properly used. This data sheet does not dispense in any case the user to know and applies all regulatory rules concerning his activity..

End of document

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