X-2 CRYSTALLIZER

Safety sheet

Revised on 13 - 01 - 06

1. ID card of the company and the product

Description of the product: X-2 Crystallizer

Use: Polishing and vitrifying product in one operation, usable on marble and terrazzo. This product was especially created for the finishing of the job.

Data of the company: PRODUCTOS CASELLI, S.L.
C/ Islas canarias, 43 Parcela 18
Polígono Industrial Fuente del Jarro (2ª Fase)
46988 PATERNA (Valencia)7
Tel: (+34) 96/134-03-11 Fax: (+34) 96/134-08-81
NIF: B- 46029369 No./ Sanitary Register: 37.00600/V

In case of urgency, call the following number: (+34) 96/134-03-11

2. Contents/Information about the components

EINECS Number	Name		Concentration Interval	Symbol	Risk Phrases
231-633-2	PHOSPHORIC ACID	75%	0 -1%	C	R 34
241-022-2	MAGNESIUM FLUORSILICATE		15 - 30%	T	R 25

3. Possible dangers

This product is toxic if ingested or if it gets in contact with the skin. The product is corrosive.

3.1. Environmental hazard

Fluorides might be poisonous. The product is highly soluble in water. It might have a toxic effect on fishes or plankton.

3.2. Hazard for the human health

It is toxic if inhaled, ingested or if it contacts with the skin. It might cause burns. Fluorosis (bone calcium is captured fluorides) by might appear after long and repeated exposure to the product (fluoride ions would be absorbed into the blood), inhalation of powder or vapours, ingestion or skin absorption. Serum levels of calcium and magnesium might be reduced, following to the absorption of fluoride ions into the blood, causing a possible hypocalcaemia or

hypomagnesia. It might also cause severe and dangerous disturbances on the metabolism, as well as on renal and hepatic function.

Symptoms of severe poisoning include breathing difficulties, congestion on lungs, muscular spasm, convulsion and breakdown.

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4. First Aid

Immediate application of the treatment is essential, in order to diminish the severity of the consequences of burns and poisoning.

If this product gets in contact with the eyes: rinse them off with abundant water during at least 15 minutes, keeping eyelids opened. Ask immediately for medical aid.

If in contact with the skin: The direct contact of this liquid with the skin might cause burns, that could be initially unapparent. Fluoride ions make very fast a way into the skin and tissues, causing a necrosis of the soft tissues and loss of bone deposits of calcium.
Wash immediately with abundant water and soap, during at least 5 minutes. Thereafter rub the affected area with a gel of 2,5% of Calcium Gluconate. Should the latter be unavailable, wash with water during at least 15 minutes. Remove all the contaminated clothes. If irritation persists after washing the area, ask for medical aid.

If inhaled: Long and repetitive exposure to low concentration of gas, might cause nasal congestion and bleeding and bronchitis.
Carry the affected person away from the dangerous area, keeping him warm and as comfortable as possible. Six oral tablets of effervescent calcium (400 mg of calcium/ tablet) should be given to the patient. In case of breathing difficulties, apply oxygen using a facial mask.
Medical treatment should be applied as soon as possible.

If ingested: The product causes necrosis on oral cavity, oesophagus and stomach. Dizziness, vomiting, diarrhoea and circulatory breakdown are also likely to happen. If the patient is conscious, force him immediately to drink two glasses of water or milk. Do not stimulate vomiting. Give the patient 6 tablets of effervescent calcium diluted in water. Ask immediately for medical aid.
PRECAUTION: Ingestion of small amounts of the product might cause a violent hypocalcaemia. In case of poisoning or accident, go immediately to a Urgency Service of a hospital.

"Information on the updated composure of the product was sent to the National Service of Toxicology (National Institute of Toxicology). In case of poisoning, call the Toxicological Information Service. at the 24 hours Telephone.: (+34) 91 562 04 20

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5. Safety measures in case of fire

This product is neither inflammable nor explosive. IT is not combustible or comburent.

It is advisable to use carbon dioxide, foam, dust or sprayed water in order to extinct fire. It is very unlikely to cause fire or explosion. Respiratory protection and complete chemical protective clothes should be provided during the extinction duties.

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6. Measures to be taken in the event of an incidental upsetting

Use proper protective clothes (consult paragraph 8). Take it up with some absorbent and fireproof material, as for instance, sand. Neutralize with lime. Never use organic acids.

Avoid the contamination of drainpipes and surface waters.

Avoid the leaking of the product into the earth or vegetation

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7. Storage and manipulation

7.1. Manipulation

The concentrated product should be handled with gloves. Absorption of the product or contact to it should be avoided. Manipulation of the containers should be carried out with care, preventing possible leaking of the product. Good ventilation is important. Partially opened containers should be closed hermetically after their use and sent back to the store room. Empty containers could still have some remainders of the product and should be handled as if they were full.

7.2. Storage

The product should be stored in a dry and well ventilated place, far away from any source of heat and of incompatible products, in a special area adequate for toxic products. Store it in the original container, keeping it hermetically closed. Avoid storing it close to human or animal food. Avoid storing the product close to acids. Keep the empty, full or half empty containers in an upright position.

After the Spain legislation, lf the amount is larger than 250 kg. it should comply with the R.D.379/2001 (Regulation for the storage of chemical products.

The product can be packed in tins or plastic containers.

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8. Range of exposure and necessary equipment for personal protection

Limit figures on repeated exposure:

VLA-ED. 2,5 mg. (F)/m^3 – INSHT guide

Biological limit figure: VLB

Biological indicator: Finding of Fluorides in urine.

At the end of the working day 8 mg./l.- INHST guide.

Previous to the shift 4 mg./g. Creatinine at the end of the shift 7 mg./g. Creatinine – BAT.

8.2. Control of exposure

A periodic control of the working environment should be carried out.

8.2.1. Control of professional exposure

Do not eat, drink or smoke while handling the product. It is recommended to have a shower after finishing the journey. Wash the hands before every break. Change working clothes after handling the product. Change dirty or wet clothes, washing it prior to its reuse. Keep working clothes separate. Shower and washroom areas should be kept apart of the wardrobes. Keep the product away from any kind of food, drinks or seasoning products.

Breathing protection Not necessary for the usual tasks.

Protection of the hands Use always protective gloves: Use rubber or neoprene gloves.

Protection of the eyes Use protective glasses, especial for chemicals. They are similar to the glasses used by the motorcyclist or divers and should be very tight. It is of general

knowledge that the use of contact lenses is inadvisable when working with chemical products, as they may increase the severity of the ocular damage.

Protection of the skin Change the stained or splashed clothes. In general terms light protection clothes (diver clothes) with long sleeves and rubber or neoprene boots should be fitting. Additionally, special clothes impervious to particles, EPI category 5 type 5, with autonomous breathing equipment, should be available for cases of emergency.

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9. Physical and chemical properties

Appearance: Blue liquid fluid

Density: 1.123 g/cc aprox.

Resistance to temperatures:
To cold: -20º C
To heat: +50º C

pH of the concentrated product: 1-2

pH of application:1-2

Solubility in water: completely miscible

Ignition point: >100º C

Smell: Odourless

Vapour density: Not applicable

In flammability: Non inflammable

Temperature of ignition: Not applicable

Limits of explosion: Not applicable

Heat decomposition: Aprox. 120º

Explosive properties: Not explosive

Liposolubility: no data available

Boiling point: Aprox. 112ºC to 1013 mbar. showing decomposition

Coefficient of distribution of n-octanol/water: no data available

Viscosity: no data available

Evaporation speed: no data available

Comburent properties: Non comburent

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10. Stability and reaction

The product is stable in normal conditions. Decomposition should not be expected if it is properly used.

10.1. The following conditions should be avoided:

- Heat over 120º
- Humidity. The product should be kept dry.

10.2. The following materials should be avoided:

- Strong mineral acids.
- Contact with steel and other metals.
- It us harmful on silica and, most especially on glass, cement, natural rubber and leather.
- It reacts with alkalis.

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11. Toxicological information

11.1. Inhalation
The product has a caustic effect and might cause poisoning by fluorides.

11.2. Ingestion
It might cause irritation of the digestive system, followed by a fatal poisoning by fluorides.
Oral – (Guinea pig) LDL_{50}200mg/Kg.

11.3. Contact with the skin
Irritation of the skin is possible. A long and repeated contact might cause ulcerations. No data available.

11.4. Contact with the eyes
Irritation of the eyes is possible, but permanent damage is not expected if it is treated immediately. There are no experimental data available.

11.5. Sensitization
A sensitization to ion fluorine is very unlikely.

11.6. Carcinogenesis
There is no evidence of a connection between cancer and exposure to inorganic fluorides (IARC).

11.7. Mutagenesis
The product is not considered mutagenic.

11.8. Toxicity on reproduction
Not toxic on reproduction.

11.9. Narcosis
Not narcotic

11.10. Chronic effects
It has no chronic effects

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12. Ecological information

The environmental toxicity of this product is due to its contents on Magnesium Fluorsilicate.

Avoid pouring any remains of the product into the draining pipes, or into soil or plants. Avoid the leaking of the product into surface waters, sewage or soil.

It has a toxic effect on fishes, plankton, plants and trees. If the product persists in soil or earth, it will strongly bind the fluorides if the pH is >6,5. Fluorides will also be tied up by high contents of calcium.

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13. Directions for its removal

13.1. Treatment of the product

Make the best use of the product. Remaining solutions shall be neutralized, by means of an alkali, being lime the most advisable.

13.2. Treatment of the containers

Make the best use of the product. The containers should be treated by an authorized agent.

Prior to any procedure of removal, consult the national legislation, as well as the autonomic and local regulation.

The product shall be removed according to the prevailing legislations. Act 11/97, about containers and remainders of containers. Act 10/98, about remainders.

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14. Directions with regard to the transport

ADR
UN No.: 3289
Toxic inorganic corrosive liquid n.o.s.
Type/Paragraph: 6.1. Packaging Group II. Label/s: 6.1, 8.

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15. Legislation

According to the prevailing legislation in Spain, the label of the product should include the following data:

CASELLI X-2 Crystallizer

PICTOGRAM OF TOXIC PRODUCT
PICTOGRAM OF CORROSIVE PRODUCT

It includes Magnesium Fluorsilicate and Phosphoric acid

It might be toxic if ingested R 25

It might cause burns R 34

It is irritating for eyes and skin R 36/38

Avoid the contact of the product with the skin and mucosa.

Keep away from children S 2

Keep the containers closed S 7

Keep away from human or animal food or beverages S 13

Avoid the contact of the product with the skin or the eyes S 24/25

If the product gets into the eyes, wash immediately with abundant water and consult a doctor. S 26

Should the product get in contact with the skin, wash the area immediately with abundant water. S 28

Use proper clothes and gloves and protection for eyes and face. S 36/37/39

Should there be an accident or discomfort, call immediately a doctor, showing him/her the label of the product. S 45

In case of ingestion, call immediately a doctor, showing him/her the label or the bottle of the product. S 46

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16. Further information

R 25: The product is toxic if ingested

R 34: It might cause burns

Applications of the product:

This product was especially created for the preparing of crystallisations. It is easy to apply, cleaning deeply and covering the pores. It has a vitrifying effect and increases the adherence and durability of the crystallisation. It doesn't show any footprints. It is most suitable for marble and terrazzo.

INSTRUCTIONS FOR USE

The product should be used pure. Shake well the product before use. Apply a small amount of the product on the pavement and spread it out using a rotating machine, provided with steel wool. Spread the product evenly in parallel and squared direction over an area of 2 to 3 m^2. Allow it to dry in order to get the proper gloss. To improve the gloss and the resistance to the traffic, repeat this procedure as often as necessary. Sweep up the floor in order to remove every possible remainder of steel wool.

RECOMMENDATIONS

Using the mop with our ANTI-DUST product L-31 should be enough for the daily cleaning. For the conservation and maintenance of the gloss, we suggest the use of our CONSERVING POLISHER A-9. For the mopping of the floor, we would advise you to use our CLEANER FOR POLISHED FLOOR L-11 or L-21, choosing the one which is most fitting to your needs. Do not return the remainders of product to the container. Preserve it from the cold. Aluminium baseboards should be protected from the product. Do not apply this product on ceramics, plastic, parquet or wooden floors.
