

REVA PLUS DOUBLE ACTION

1 - IDENTIFICATION OF THE SUBSTANCE :

NAME **REVA PLUS DOUBLE ACTION**

USE Solid product to increase pH and TAC in swimming pool waters

MANUFACTURER **MAREVA PISCINES ET FILTRATION**
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2 - HAZARDS IDENTIFICATION :

The product is irritant (before dilution)
The product presents the dangers of its basic function.

3 - COMPOSITION / INFORMATION ON COMPONENTS:

Components which bring a danger to the preparation:

l) >20% SODIUM CARBONATE Na₂CO₃

C.A.S. N° 497-19-8

INDEX N° 011-005-00-2

EC N° : 207-838-8

Classification : Xi R36

4 - FIRST AID MEASURES:

GENERAL STATEMENT If splashed in the eyes and on face, treat the eyes first.

INHALATION

- Irritation of throat. Cough in case of high concentration.
- in case of repeated or long exposure, risk of sore throat or nose bleeding.
- Risk grade = 3 serious consequences in some circumstances; medical assistance necessary; general precautions: systematic, and even special according to cases.

Care

- Keep victim away from dusty atmosphere, make him sneeze.
- Seek medical advice in case of respiratory symptoms.

CONTACT WITH EYES

- Strong irritation, lacrimations, red eyes and swelling of eyelids
- Risk of serious or permanent eye lesions.
- Risk grade = 2 moderate consequences in all circumstances; first aid is enough; general precautions in all cases.

Care

- Without losing time, wash immediately with plenty of water for 15 minutes while maintaining eyes open.
- Seek medical advice in all cases.

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4 - FIRST AID MEASURES (followed):

CONTACT WITH SKIN	<ul style="list-style-type: none">- Irritations in case of contact with wet skin- Dry and chapped skin in case of repeated contacts.- Risk grade = 3 serious consequences in some circumstances; medical assistance necessary; systematic general precautions, and even special precautions according to cases
Care	<ul style="list-style-type: none">- Take off contaminated clothes.- Wash contaminated body parts with water .- Seek medical advice in case of red spots or persisting pain.
INGESTION	<ul style="list-style-type: none">- Strong irritation and risk of burns of mouth, throat, oesophagus, and stomach- Nausea and vomitings.- If large quantities are swallowed : nausea and bloody vomitings, abdominal cramps and bloody diarrhea- Risk grade = 2 moderate consequences in all circumstances; first aid are enough; general precautions in all cases.
Care	<ul style="list-style-type: none">- Doctor in all cases. Plan to transport the victim to hospital.- Treatment of digestive burns and their sequela.- Conscious victim: rinse mouth - do not give to drink - do not induce vomiting- Unconscious victim: open collar and tight clothes. <p>Lay him on his left side, in safety lateral position.</p> <ul style="list-style-type: none">- Respiratory resuscitation and oxygen if necessary.- Avoid cooling down.

5 - FIRE FIGHTING MEASURES :

EXTINGUISHING MEANS	Sprayed water, foam, powder, carbon dioxide. Prevent fire fighting effluents from going into sewer and rivers.
SPECIFIC DANGERS	None, the product in not flammable, nor combustible, nor explosive.
PARTICULAR PRECAUTIONS:	Use isolating self-contained respiratory protection devices. Do not breathe fumes.

6 - ACCIDENTAL RELEASE MEASURES :

PERSONAL PRECAUTIONS	wear protective clothes, gloves and goggles Stay away from possible splashes.
PRECAUTIONS FOR ENVIRONMENTAL PROTECTION	Prevent product from going into sewer, rivers, rainwater networks... If product contaminates ground water, rivers or sewer, warn competent authorities according to regulatory procedures.
CLEANING METHOD	Pick up granules mechanically while avoiding making dust. Collect waste in compatible containers (close and label well) for disposal (specialized treatment centre). If possible, rinse contaminated ground with water, suck and collect cleaning waters. Send them to a specialized treatment centre.

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7 - HANDLING AND STORAGE :

HANDLING	Avoid contact with skin, eyes and clothes. Avoid causing dust. Work in a well ventilated place. Handle away from reactive substances. Wash hands after use. Do not drink, eat or smoke during use. Install a safety shower and eyewash fountain next to work places.
STORAGE	Keep containers tightly closed and in a dry place. Store in plastic materials or in enamelled steel containers.
OTHERS	Inform the personnel about product's danger. Follow protection measures (see point 8).

8 - EXPOSURE CONTROLS - PERSONAL PROTECTION :

GENERAL MEASURES	aerated place - air suction on place of release if necessary. safety showers and eyewash.
RESPIRATORY PROTECTION	: P2 type dust-proof mask
HAND PROTECTION	protective gloves (recommended materials: rubber, neoprene).
EYE PROTECTION	in case of risk of dust: dust-proof goggles. in case of risk of splash: face screen
SKIN PROTECTION	covering clothes. overgarments and boots in case of risk of dust or splashes

9 - PHYSICAL AND CHEMICAL PROPERTIES:

PHYSICAL STATE	solid (hygroscopic powder, crystals, or granules).
COLOUR	white
ODOUR	odourless
pH at 25 °C (at 1 %)	11 - 12
FUSION POINT	ca. 851 °C
DECOMPOSITION	> 400 °C
FLASH POINT	not concerned
EXPLOSIVITY	not explosive
FLAMMABILITY	not flammable
SELF-IGNITION	not flammable
APPARENT DENSITY	2,533
SOLUBILITY IN THE WATER	ca. 71 g/l at 0 °C (hardly soluble in absolute alcohol)

10 - STABILITY AND REACTIVITY :

STABILITY	Stable in recommended handling and storage conditions Avoid heat (or heat sources) and humidity.
MATERIALS TO BE AVOIDED	Dangerous reactions with acids and lime Attacks many metals in case of water and humidity.

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11 - TOXICOLOGICAL INFORMATION :

GENERAL STATEMENT - Toxic effect mainly due to the irritating properties of the product
- No specific effects.

12 - ECOLOGICAL INFORMATION:

Data on SODIUM CARBONATE

ACUTE ECOTOXICITY - LC 50 on fish (*Lepomis macrochirus*) at 96 hours = 300 mg/l.
- EC 50 on crustacea (*Daphnia magna*) at 48 hours = 265 mg/l.
- EC 50 on algae (*Nitzschia linearis*) at 5 days = 242 mg/l.

CHRONIC ECOTOXICITY - EC 50 on phytoplankton (biomass) at 7 days = 14 mg/l.

MOBILITY - in the air = not applicable.
- in the water = important solubility and mobility
- in the ground and sediments = adsorption is not significant

13 - DISPOSAL INFORMATION :

WASTE Recycle or dispose of according to regulations in force. Do not contaminate ground or water with waste. Do not dispose of in the environment.

CONTAMINATED PACKAG. Rinse several times with water before disposal.
Eliminate according to regulations in force.

14 - TRANSPORT INFORMATION :

The product is not subject to regulations in force.

15 - REGULATORY INFORMATION: (conform to EC regulation n°1272/2008 (GHS))

Classification and labelling Eye irritation cat2



WARNING

Danger phrases

H319 Causes serious eye irritation

Caution advice - Prevention

P102 Keep out of reach of children
P264 Wash hands thoroughly after handling
P280 Wear protective gloves/protective clothing/eye protection/face protection

Caution advice - Response

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.

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15 - REGULATORY INFORMATION: (conform to the orders of 20 april 1994 and/or 21 february 1990 and adaptations, dealing with classification and labelling of hazardous substances and preparations)

" Sodium Carbonate"

Hazard symbol

Xi - irritant



Xi - Irritant

R Phrases

36 - Irritating to eyes

S phrases

- 2 - Keep out of reach of children
- 22 - Do not breathe dust
- 24 / 25 - Avoid contact with skin and eyes
- 26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 46 - If swallowed, seek medical advice immediately and show this container or label

16 - ADDITIONAL INFORMATION :

The information contained in this safety data sheet are based on our knowledge and mail legal and regulatory texts related to the product, and promulgated at the date of updating of this document. This safety data sheet was written and must be used only for this product.

See instructions for use on labels or seek information from your professional retailer.

Combined nomenclature (INTRASTAT) for customs statistics = **2836.20.000**