

REV-AQUA (POUCH 18-60m3)

1 - IDENTIFICATION OF THE SUBSTANCE :

NAME **REV-AQUA (POUCH 18-60m3)**

USES Disinfectant and algacide for swimming pool water treatment

MANUFACTURER **MAREVA PISCINES ET FILTRATION**
Z.I. du bois de Leuze -13 310 SAINT MARTIN DE CRAU - France
Tel : 33 - 04.90.47.47.90 - Fax : 33 - 04.90.47.95.07

e-mail of the person in charge for the Safety Data Sheet: tech@mareva.fr

Emergency dial number +33 (0)4.91.75.25.25 (Poison Control Center of Marseilles)

2 - HAZARDS IDENTIFICATION :

HAZARDS FOR HUMANS

Harmful if swallowed.
Contact with acids liberates toxic gas
Irritating to eyes and respiratory system (before dilution)
May help burning of combustible materials

HAZARDS FOR THE ENVIRONMENT

Very toxic to aquatic organisms, may cause long-term adverse effects in the environment.

3 - COMPOSITION / INFORMATION ON COMPONENTS :

Substances used in the preparation:

Trichloro isocyanuric acid = 1,3,5-Trichloro-1,3,5-triazine-2,4,6(1H,3H,5H)-trione

C.A.S. N° = 87-90-1 INDEX N° = 613-031-00-5

O, Xn, N, R8, R22, R31, R36/37, R50/53

COMPOSITION 100% of trichloroisocyanuric acid

4 - FIRST AID MEASURES:

CONTACT WITH SKIN Rinse immediately with plenty of soap and water.

CONTACT WITH EYES Rinse immediately with plenty of water for about 15 minutes. Seek medical advice.

INGESTION Do not induce vomiting. Give bread soaked in milk, then edible oil. Seek medical advice. Never give anything to eat or drink to an unconscious victim.

DUST INHALATION Bring the person to fresh air. Seek medical advice in case of cough or respiratory disability symptoms.

5 - FIRE FIGHTING MEASURES :

Warning: oxidizing product

EXTINGUISHING MEANS Use plenty of cold water on fire source(s), after isolating them.
WARNING: overall, do not use powder extinguishers containing ammonium compounds.

EQUIPMENT Protective clothes (with total face protection).
Self-contained breathing device.

6 - ACCIDENTAL RELEASE MEASURES :

CLEANING METHOD Pick up mechanically the blocks, tablets and the induced dust.
Store the blocks separately from the induced dust in waterproof tanks.
Label well these tanks and send them back to the supplier.
Clean the contaminated surface with plenty of water.
The product is hardly soluble in the water.
If cleaning waters are collected, they may be neutralised with a reducer (such as sodium thiosulphate) while checking pH and temperature.

PERSONAL PROTECTION Gloves, mask, goggles

7 - HANDLING AND STORAGE :

Pay much attention to humidity, sun exposure and temperature.

Keep away from flammable, combustible liquids, and from any oxidable material

8 - EXPOSURE CONTROLS - PERSONAL PROTECTION :

EXPOSURE CONTROLE If necessary, use a respiratory protection device against dusts or fumes.
The roofs must be equipped with efficient ventilation systems.

PERSONAL PROTECTION Gloves, goggles, work clothes with long sleeves.
Safety showers and eyewash next to work places.

9 - PHYSICAL AND CHEMICAL PROPERTIES:

PHYSICAL STATE : white granules
ODOUR : chlorine
pH at 25°C (at 1% in the water) : 2.8
FUSION POINT : 225°C
DECOMPOSITION : 225°C
FLASH POINT : not concerned
FLAMMABILITY : not concerned
EXPLOSIVITY : not concerned
VOLUMIC MASS : ca 1040 kg/m³ (apparent density = 1.04)
SOLUBILITY IN THE WATER : 1.28g/100ml of water at 25°C

10 - STABILITY AND REACTIVITY :

Stable in normal conditions of humidity (high levels of humidity must be avoided)

INCOMPATIBILITIES

The product is chemically incompatible with the following compounds :

- acids (chlorine gas release).
- **calcium hypochlorite (risk of explosion)**
- organic materials or easily chlorinated or oxidized materials (risk of fire)
- ammonia, ammonium salts, urea and all similar compounds which contain nitrogen (risk of nitrogen trichloride formation, very explosive)
- oils or greases (risk of decomposition with release of CO₂ or chlorine)
- alkaline materials, such as Na₂CO₃, in case of humidity (risk of violent decomposition and fire)
- alcohols, ether, biurea, and solvents such as toluene, xylenes, ...

Product with dangerous decomposition: nitrogen trichloride, chlorine, hydrocyanic acid.

11 - TOXICOLOGICAL INFORMATION :

Acute oral toxicity : LD 50 on male rat = 1.060 mg/kg
: DLA on female rat = 1.010 mg/kg
No sign of subacute toxicity on the tests
(oral on rat for 1 month, from 10 to 400 mg/kg)

12 - ECOLOGICAL INFORMATION:

Aquatic toxicity 1.5 (48 hours - TLM 5ppm - oryzias latipes))

Dangerous for the environment: very toxic to aquatic organisms; may cause long-term adverse effects on the aquatic environment

13 - DISPOSAL INFORMATION :

Dissolve while agitating the product to be disposed of in an alkaline solution (NaOH or lime),
Neutralise this solution with a reducing agent (Na₂SO₃),
Adjust pH with an acid (H₂SO₄ or HCl),
Dispose of chlorinated product according to regulations in force.

Only dispose of a solution of this product if it does not contain active chlorine anymore.

14 - TRANSPORT INFORMATION :

UN N° : 1479 OXIDIZING SOLID, N.O.S. (trichloroisocyanuric acid)

ROAD TRANSPORT

Class = 5.1 - Packaging group = II - Danger label = 5.1 - Danger code n° = 50

SEA TRANSPORT

IMDG Code = 5190 - class 5.1 - Packaging group = II

Safety data sheet n°5.01-05 - GSMU table n° = 740

This product may, in some cases, be exempted (packaging in **Limited Quantities LQ11 = 500g**)

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

Classification and labelling

Acute toxicity (oral) cat4
Serious eye lesions / eye irritations cat2
Specific toxicity for some target organs -
Single exposure, cat3: irritation of the respiratory system
Chronical danger for the aquatic life cat1
Oxidizing solid cat2



DANGER



WARNING



WARNING

Danger phrases

H272 May intensify fire; oxidiser
H302 Harmful if swallowed
H319 Causes serious eye irritation
H335 May cause respiratory irritation
H410 Very toxic to aquatic life with long lasting effects
EUH031 Contact with acids liberates toxic gas

Caution advice - Prevention

P102 Keep out of reach of children
P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking
P261 Avoid breathing dust/fume/gas/mist/vapours/spray
P271 Use only outdoors or in a well-ventilated area
P273 Avoid release to the environment
P280 Wear protective gloves/protective clothing/eye protection/face protection

Caution advice - Response

P301/310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P304/340 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.

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)

Trichloroisocyanuric acid - EC Labelling : 201-782-8

"Warning! Do not use in combination with other chemicals. May release dangerous gas (chlorine).

Danger symbols

O- Oxidizing , **Xn** - Harmful and **N**- Dangerous for the environment



O - Comburant



Xn - Nocif



N - Dangereux pour l'environnement

R phrases

8 - Contact with combustible material may cause fire
22 - Harmful if swallowed
31 - Contact with acids liberates toxic gas
36 / 37 - Irritant to eyes and respiratory system
50 / 53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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)

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|-----------|--|
| S phrases | 2 - Keep out of reach of children |
| | 3 - Keep in a cool place |
| | 8 - Keep container dry |
| | 26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. |
| | 29 - Do not empty into drains |
| | 46 - If swallowed, seek medical advice immediately and show this container or label |

16 - ADDITIONAL INFORMATION :

RECOMMENDATIONS

- Keep an emergency aid plan ready.
- Keep product away from incompatible materials.
- Store in a cool, dry and well ventilated place.
- Always store on pallets or shelves.
- Clean equipments properly before changing product.
- Empty hoppers at the end of each working day.
- Wear suitable working clothes or equipments.
- Keep lids clean and near drums in case of emergency.
- Keep workshop management informed.
- Keep product sweepings dry before neutralising them.

RESTRICTIONS

- Store liquid products above this solid.
- Do not leave organic materials (greases) accumulate on the ground.
- Do not smoke in a premises used for storage or processing of chlorinated products
- Do not use common air suction system for incompatible products
- Do not use gasoil or gasoline forklifts.
- Do not use household products for workshop grounds cleaning.
- Do not use original containers to collect sweepings.
- Do not leave product to be wet.
- Do not dispose of product in a common waste container.
- Do not allow release of non neutralised product in sewer.
- Do not use a powder extinguisher in case of fire.

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 = **3808942090**