

# CHLOR 12

Potable Water Treatment

## Technical Information

### Physical Data

Form:	Liquid
Color:	Light yellow
Odor:	Chlorine
pH (@20°C):	11
Flash Point:	None

### Description

Chlorine is a chemical compound with the formula NaClO. Chlorine solution, commonly known as bleach, is frequently used as a disinfectant or a bleaching agent.

### Advantages

- ▶ Control and removal of bacterial flora ensured, meeting essential requirements for drinking water.
- ▶ 12% CHLORINE is universally recognized as a disinfectant for drinking water (approved by the Ministry of Health), making its use permissible in all civil water supply lines.

### Recommended Dosage

- 0.2 ppm of RESIDUAL ACTIVE CHLORINE, as assessed by DPD method and tablets or ortho-tolidine, should always be present at the ship or pipeline's farthest point from the place of application. Residual chlorine in drinking water tanks should range between 0.5 and 2 (maximum) ppm to ensure wide-range antibacterial protection. To obtain 2 ppm in a drinking water tank, add 20 cc of CHLOR 12 (equivalent to approximately 20 pump strokes of the proportioning pump) for every cubic meter of water.
- CHLOR 12 may be proportioned manually with the proportioning pump or automatically during water loading by a proportioning system featuring a pulse water meter connected to a special proportioning pump. To obtain 20 cc per ton of CHLOR 12 (or 200 cc every 10 tons), a meter must be installed to release one impulse every 50 liters of water flowing inside the pipe.
- Alternatively, an oversized meter can be used (i.e., every 10 liters). In this case, the chlorine solution must be diluted with water, or the proportioning pump has to be set to have a pump stroke every 50 liters. Consult a Uniservice Unisafe Service Engineer for swimming pool and Jacuzzi pool disinfection.

### Emergency Response Measures

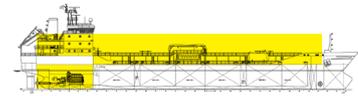
**Inhalation:** Fresh air, rest, half-upright position, and transport to the hospital.

**Skin:** Remove contaminated clothes, rinse the skin with plenty of water or shower, and call a doctor if necessary.

**Eyes:** First rinse with plenty of water, then transport to a doctor.

**Ingestion:** Rinse the mouth, give plenty of water to drink, and transport to the hospital immediately.

#### USAGE AREAS



Water Treatment

#### PACKAGING



#### APPROVALS



IMO APPROVED  
MEPC.2 ANNEX 10

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## Protective Measures, Storage, and Handling

**Storage:** Do not keep the container sealed. Keep the original closing on the drum and be aware of filthiness. Keep the container in a well-ventilated dark place.

**Handling:** Personal protective equipment: respiratory protection. Hand protection: gloves (PVC). Eye protection: safety glasses.

**Industrial hygiene:** Keep away from food, drink, and animal feeding stuff. Take off immediately all contaminated clothing.

**Protection against fire and explosion:** In case of fire, keep the container cool with water spray.

**Disposal:** Waste disposal for chemical waste.

## Information on Toxicity

**Inhalation:** Pungent, sore throat, coughing, labored breathing.

**Skin:** Redness, pain.

**Eyes:** Corrosive, redness, pain, blurred vision.

**Ingestion:** Corrosive, sore throat, abdominal spasm, vomiting.

## Information on Ecological Effects

Spilling of the product into the water may cause damage to fish and water organisms by raising pH and liberating chlorine.

## Safety and Environment (HSE)

Uniservice Unisafe Srl have carefully developed their products to minimize the safety risks and environmental impact of using their products. However, Uniservice advises that, prior to using its products, users should read in detail the accompanying Safety Data Sheet and ensure that its products are applied within the required HSE regulations of the country in which the user operates. Best practice and safety requirements should be followed which will likely include method statements and risk assessments, together with any specific requirements of the user's own company HSE requirements.

## Important Notice

While the descriptions, designs, data and information contained herein are presented in good faith and believed to be accurate, this information is provided for your guidance only. Because many factors may affect processing or application/use, we recommend that you do a test to determine the suitability of a product for your particular purpose prior to use. No warranties of any kind, either expressed or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding products described or designs, data or information set forth, or that the products, designs, data or information may be used without infringing the intellectual property rights of others. In no case shall the descriptions, information, data or designs provided be considered a part of our terms and conditions of sale. Further, you expressly understand and agree that the descriptions, designs, data and information furnished by Uniservice Unisafe Srl hereunder are given gratis, and Uniservice Unisafe Srl assumes no obligation or liability for the description, designs, data and information given or results obtained, all such being given and accepted at your risk. Product images are for reference purposes only.

## Contact

For further information, please contact your local Uniservice Unisafe sales representative or get in touch with us:

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