

CHLOR 12 LIQUID

1. DESCRIPTION

12% LIQUID SODIUM HYPOCHLORITE.

2. APPLICATIONS

To be used to disinfect drinking water in aqueducts or on board ships and for disinfections of residual sewage water from waste water treatment. Also used for swimming pool and jacuzzi pool water disinfections.

3. DIRECTIONS FOR USE

0.2 ppm of **RESIDUAL ACTIVE CHLORINE** as assessed by **DPD** method and tablets or ortho-tolidine should always be present in the ship or pipeline farthest point from place of application. Residual chlorine in drinking water tanks should range between 0.5 and 2 ppm (maximum), to ensure wide range antibacterial protection. To obtain 2 ppm in a drinking water tank, put 20 cc of **CHLOR 12** (corresponding to approximately 20 pump strokes of the proportioning pump) for every cubic meter of water.

CHLOR 12 may either be proportioned manually with the proportioning pump or automatically upon water loading by means of a proportioning system featuring a pulse water meter connected with a special proportioning pump.

To obtain 20 cc per ton of **CHLOR 12** (or 200 cc every 10 tons), a meter must be installed releasing one impulse every 50 liters of water flowing inside the pipe.

Alternatively, and oversized meter can be used (i.e. every 10 liters). In this case the sodium hypochlorite solution must be diluted with water or the proportioning pump has to be set to have a pump stroke every 50 liters.

Consult UNI AMERICAS Service Engineer for Swimming Pool and Jacuzzi Pool disinfections.

4. CONTROL LIMITS

NATURE OF SPECIAL RISKS AND SAFETY ADVICE

In accordance with the latest E.E.C. Council directives this product is subject to the following official recommendation:

R 31	:	Contact with acids liberators toxic gas.
R 34	:	Causes burns.
S 2	:	Keep out of reach of children.
S 28	:	After contact with skin, wash immediately with plenty of water.
		Contains approximately 15% maximum of active chlorine.
Symbol	:	C (Corrosive)

MEASURE IN CASE OF ACCIDENTS AND FIRES

12% SODIUM HYPOCHLORITE DISINFECTANT ACTIVATOR

Product Highlights

- Disinfectant for drinking water.
- Disinfects residual sewage water.

Product Characteristics

Appearance:	Clear yellow liquid
Corrosive action:	Hypochlorite
Specific gravity:	(20°C) 1.3
Flash Point:	None
pH:	>13

This information is not to be taken as a warranty or representation for which we assume any legal responsibility. The information is offered solely for your consideration, investigation and verification

clean chemicals clean ships clean seas



CHLOR 12 LIQUID

After spillage / leakage / gas leakage: Collect leaking liquid in sealable containers, wash away remainder with large amount of water.

Extinguishing media Suitable: N/A

First Aid:

Inhalation: Fresh air, rest, half-upright position and transport to hospital.
 Skin: Remove contaminated clothes, rinse 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 mouth, give plenty of water to drink and transport to hospital immediately.

5. OTHER INFORMATION

Control and removal of bacterial flora ensured thus meeting the essential requirements for drinking water. **12% SODIUM HYPOCHLORITE** is universally recognized as a disinfectant for drinking water (approval by the MINISTRY OF HEALTH) therefore its use is allowed in all civil water supply lines.

6. NOTES

PROTECTIVE MEASURES, STORAGE AND HANDLING

Technical protective measures:

- A. Storage: Do not keep the container sealed. (Keep original closing on drum and be aware of filthiness). Keep container in a well-ventilated dark place.
- B. Handling: Personal protective equipment.
 - a) Respiratory Protection
 - b) Hand Protection: Gloves (PVC).
 - c) Eye Protection: Safety glasses.
 - d) Other: Industrial hygiene.
 - Keep away from food, drink and animal feeding stuff.
 - Take off immediately all contaminated clothing.
- C. Protection against fire and explosion: In case of fire keep container cool with Water spray.
- D. 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 fishes and water organisms by raising pH and liberation of chlorine.