

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006

Hemodialysis Machine Disinfectant; with Active Chlorinated

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Trademark	: GBL® CITROTAL 100
Product Name	: Hemodialysis Machine Disinfectant; with Active Chlorinated
REF No	: 6338

1.2. Relevant identified uses of the substance or mixture and uses advised against:

Cold disinfectant for hemodialysis machines. Fast acting cleansing agent to remove biofilms (source of endotoxins which may cause clinical symptoms) in haemodialysis machines and water systems. The sodium hypochlorite in CITROTAL 100 is an antibacterial agent. Free chlorine reacts with cell proteins and bacterial enzymes. Hypochloric acid is generated in the alkaline aqueous solution. Oxygen, which is a strong oxidant and microbicidal, is released.

1.3. Detailers of the supplier of the safety data sheet:

Company Name : GBL Gül Biyoloji Laboratuvarı Sanayi ve Ticaret Anonim Şirketi
Address : HQ: Serifali Mah. Hattat Sk. No:10 P.O.: 34775 Ümraniye İstanbul TÜRKİYE
Factory: Dudullu OSB Mah. İMES C Blok 305 Sk. No:16 P.O.: 34775 Ümraniye İstanbul TÜRKİYE
Telephone : +90 216 364 15 00
Fax : +90 216 314 15 69
E-mail : export@gbl.com.tr

1.4. E-Mail Address Of The Person Responsible For The MSDS: Andaç Arslan – Chemist – andac@gbl.com.tr

1.5. Emergency Telephone Number:

Telephone : +90 (216) 364 15 00 or contact your local emergency telephone number

SECTION 2. HAZARD IDENTIFICATION

2.1. Classification of the Substance or Mixture

2.1.1. Product definition: Mixture

2.1.2. Classification according to regulation (EC) No. 1272/2008 (GLP/GHS):

Skin corrosion/irritation: Category 1B; H314

2.2. Label Elements

Labeling (Regulation (EC) No 1272/2008)

2.2.1. Hazard Pictograms



2.2.2. Signal word:

Danger

2.2.3. Hazard statement:

H314: Causes severe skin burns and eye damage

2.2.4. Precautionary statements:

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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.

P405 Store locked up.

Special labelling of certain mixtures

EUH031 Contact with acids liberates toxic gas.

2.3. Other Hazards

None

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**3.1. Substance:**

Not applicable

3.2. Mixture:

Chemical Name	EC No	CAS No	Concentration %	REGULATION(EC) No 1272/2008)
Sodium hypochloride solution 15% active chloride	231-668-3	7681-52-9	% < 35	Skin Corr. 1B, H314 Aquatic Acute 1, H400 EUH031

SECTION 4. FIRST AID MEASURES**4.1. Description of first aid measures****General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

Remove the victim into fresh air. Immediately consult a doctor/medical service.

In case of skin contact

Wash immediately with lots of water. Remove clothing before washing. Consult a doctor/medical service.

In case of eye contact

Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. Take victim to an ophthalmologist if irritation persists.

If swallowed

Rinse mouth with water. Give nothing to drink. Do not induce vomiting. Immediately consult a doctor/medical service. Take the container/vomit to the doctor/hospital.

4.2. Most important symptoms and effects, both acute and delayed

No data available.

4.3. Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5. FIREFIGHTING MEASURES**5.1. Extinguishing Media:****5.1.1. Suitable Extinguishing Media:**

Water spray.

5.1.2. Unsuitable Extinguishing Media:

Water jet.

5.2. Special Hazards Arising From The Substance Or Mixtures:

No data available.

5.3. Advice for firefighters:

Special protective masks and protective clothing should be worn during fire fighting. Use self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with eyes and skin. Make sure there is good ventilation. Do not breathe waste. For personal protection see section 8.

6.2. Environmental precautions

Do not let product enter drains.

6.3. Methods and materials for containment and cleaning up

Stop leaks if possible. Collect spillage with non-combustible absorbent materials (sand, soil) and place in waste containers in accordance with local/national regulations.

6.4. Reference to other sections

For disposal see section 13.

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Wear personal protective equipment. Avoid contact with eyes. Make sure there is good ventilation. Avoid direct contact with the substance. For precautions see section 2.2.

7.2. Conditions for safe storage, including any incompatibilities

Ensure adequate and good ventilation. The tank must be cool and dry. Smoking, eating and drinking should be prohibited in the environment. Store the substance / preparation in its original container.

For recommended storage temperature, see product label.

7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8. EXPOSURE CONTROLS/PERSONEL PROTECTION

8.1. Control Parameters Occupational Exposure Limits

No data available.

8.2. Exposure controls

Appropriate engineering controls

Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts

Skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let the product enter drains.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information On Basic Physical and Chemical Properties**

Form	: Liquid
Odour	: No data available
Colour	: Light yellow.
pH @ 25 °C (ca)	: 13,9 +/- 0,3
Melting point/freezing point	: No data available
Flash point	: No data available
Evaporation rate	: No data available
Upper/Lower Flammability or explosive limits	: No data available
Vapor pressure	: No data available
Density	: No data available
Solubility(ies)	: Soluble.
Viscosity	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Decomposition temperature	: No data available

Note: Integers (i.e. 3 or 7) should be read in as decimals (3,0 or 7,0).

SECTION 10. STABILITY AND REACTIVITY**10.1. Reactivity:**

Reactions with strong alkalies and oxidizing agents.

10.2. Chemical Stability

Product is stable in conditions without supply of air, of moisture.

10.3. Possibility of HazardousReactive with: strong alkalies and oxidizing agents.
Reactions can lead to the risk of an explosion.**10.4. Conditions to avoid**

no data available

10.5. Incompatible materials

Acids, phenol, metals, nitrile, cyanide salt, oxidizing materials, organic chemicals – combustible.

10.6. Hazardous Decomposition Products: No dangerous substances are released.**SECTION 11. TOXICOLOGY INFORMATION****11.1. Information On Toxicological Effects:****11.1.1. Acute toxicity**

Chemical name	Concentration %	LD50 Oral (mg/kg)	LD50 Dermal (mg/kg)	LC50 Inhalasyon (mg/l)
Sodium hypochloride solution 15% active chloride	< 8	8200 (rat)	-	-

11.2. Irritation/Corrosion

11.2.1. Eyes: Causes serious eye damage

11.2.2. Skin: Causes burns.

11.3. Sensitizer

11.3.1. *Skin*: Causes burns.

11.3.2. *Respiratory*: no data available

11.4. Mutagenicity:

11.4.1. *Conclusion/Summary*: No mutagenic effect.

11.5. Carcinogenicity:

11.5.1. *Conclusion/Summary*: No known significant effects or critical hazards.

11.6. Reproductive toxicity:

11.6.1. *Conclusion/Summary*: No known significant effects or critical hazards.

11.7. **Specific target organ toxicity (single exposure)**: Not available.

11.8. **Specific target organ toxicity (repeated exposure)**: Not available.

11.9. **Aspiration Hazard**: This information is not available.

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity

Sodium hypochlorite, solution ... percent Cl active [CAS No 7681-52-9]

LC50 Fish (96 hours)

Minimum: 0,032 mg/l

Maximum: 10 mg/l

Median: 0,18 mg/l

Study number: 30

Reference: Thatcher, T.O. 1978. The Relative Sensitivity of Pacific Northwest Fishes and Invertebrates to Chlorinated Sea Water. In: R.L.Jolley, H.Gorchev, and D.H.Hamilton,Jr.(Eds.), Proc.Second Conf.Water Chlorination, Environ.Impact and Health Effects, Vol.2, Oct.31 to Nov.4, 1977, Gatlinburg, TN :341-350; Fisher, D.J., D.T. Burton, L.T. Yonkos, S.D. Turley, and G.P. Ziegler 1999. The Relative Acute Toxicity of Continuous and Intermittent Exposures of Chlorine and Bromine to Aquatic Organisms in the Presence and Absence of Ammonia. Water Res. 33(3):760-768

Sodium hypochlorite, solution ... percent Cl active [CAS No 7681-52-9]

EC50 Crustaceans (48 hours)

Minimum: 0,04 mg/l

Maximum: 2,3 mg/l

Median: 1,57 mg/l

Study number: 5

Reference: Office of Pesticide Programs 2000. Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)). Environmental Fate and Effects Division, U.S.EPA, Washington, D.C.

EC50 Algae (72 or 96 hours)

Test Duration: 96 Stunden

Minimum: 46 mg/l

Maximum: 46 mg/l

Median: 46 mg/l

Study number: 1

Reference: Haglund, K., M. Bjorklund, S. Gunnare, A. Sandberg, U. Olander, and M. Pedersen 1996. New Method for Toxicity Assessment in Marine and Brackish Environments Using the Macroalga *Gracilaria tenuistipitata* (Gracilariales, Rhodophyta). Hydrobiologia 326/327:317-325.

12.2. Persistence and Degradability

12.2.1. *Conclusion/Summary*: Easily soluble in the following materials: water, air.

12.3. Bioaccumulative potential

Not applicable.

12.4. Mobility In Soil

12.4.1. *Soil/water partition coefficient (KOC)*: No data available

12.4.2. *Mobility*: No data available

12.5. Result of PBT and vPvB Assessment:

12.5.1.PBT: No

12.5.2.vPvB: No

12.6. Other Advers Effects:

No known significant effects or critical hazards.

SECTION 13. DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods:**

Waste materials must be disposed of in accordance with Directive 2008/98/EC and other National and Local Regulations. Leave chemicals in original containers. Do not mix with other waste. Treat uncleaned containers as the product itself.

SECTION 14. TRANSPORT INFORMATION

	ADR ³ /RID ⁴	ADNR ⁵	IMDG ⁶	ICAO ⁷ /IATA ⁸
UN/ID No.	UN 3266	UN 3266	UN 3266	UN 3266
PROPER SHIPPING NAME	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM HYPCHLORIDE SOLUTION)	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM HYPCHLORIDE SOLUTION)	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM HYPCHLORIDE SOLUTION)	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM HYPCHLORIDE SOLUTION)
CLASS	8	8	8	8
PACKING GROUP	II	II	II	II

³ ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road⁴ RID: Regulations Concerning the International Transport of Dangerous Goods by Rail⁵ ADNR: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways⁶ IMDG: International Maritime Code for Dangerous Goods⁷ ICAO: International Civil Aviation Organization⁸ IATA: International Air Transport Association.**SECTION 15. REGULATORY INFORMATION**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1. Chemical Safety Assessment

For this product a chemical safety assesment was not carried out.

SECTION 16. OTHER INFORMATION**Notice to Reader :**

The information contained herein is accurate to the latest knowledge and describes the product from the point of view of help and environmental protection as well as safe handling. The information presented in this SDS refers to the technical product only and will not apply to any processed product. Final determination of suitability of any materials is the sole responsibility of the user.