SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006

Enzymatic Cleaner for Surgical Instruments, Concentrated

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

Product identifier

Product Name	: Enzymatic Cleaner for Surgical Instruments, Concentrated
Trademark	: WARECLEAN™ EC
Product Ref No	: 6160

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

Cleaning and pre-disinfection of medico-surgical instruments, medical devices, thermosensitive instrumentation, endoscopes. Suitable for soaking baths and ultrasonic bins.

1.2. Manufacturer

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. IMES 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

1.3. E-Mail address of the person responsible for the msds: Öncü Gündü – Chemist – oncu@gbl.com.tr

1.4. Emergency telephone number:

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

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 irritation, Category 1A; 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:

P260 : Do not breath dust/fumes/gas/mist/vapors/spray.

P280 : Wear protective gloves/protective clothing/eye protection/face protection.
P301+330+331 : IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P304+340 : IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+351+338 : IF IN EYES: Rinse Cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

2.3. Other hazards: None.

3. COMPOSITION/INFORMATION ON INGREDENTS

3.1. Substance:

Not applicable.

3.2. Mixture:

Chemical Name	Classification	Concentration
Linear Alkyl Benzene Sulfonic Acid CAS No: 85536-14-7 EC No: 287-494-3	Acute Tok. 4; H302 Skin Corr. 1C; H314 Eye Dam. 1; H318 Aquatic Acute 2; H401 Aquatic Chronic 3; H412	>= 15 - < 20%
Sodium Laureth Ether Sulfate CAS No: 68891-38-3 EC No: 500-234-8	Not classified.	>= 15 - < 20%
Ethanol Denaturated, %96 CAS No: 64-17-5 EC No: 200-578-6	Flam. Liq. 2; H225 Eye Irrit. 2; H319	>= 2 - < 5 %
2-Propanol CAS No: 67-63-0 EC No: 200-661-7	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE. 3; H336	>= 2 - < 5 %
Sodium Hydroxide, %47 CAS No: 1310-73-2 EC No: 215-185-5	Skin Corr. 1A; H314 Met. Corr. 1; H290	>= 1 - < 3 %
Ethylene Diamine Tetra Acetic Acid CAS No: 60-00-4 EC No: 200-449-4	Eye Irrit. 2; H319	>= 1 - < 3 %

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. In the event of symptoms refer for medical treatment.

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 /medical service.

Rinse out mouth and give plenty of water to drink. Immediately consult a doctor 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.

5. FIREFIGHTING MEASURES

5.1. Extinguishing media

5.1.1. Suitable extinguishing media

Product itself is combustible, fire extinguishing method of surrounding areas must be considered.

5.1.2. Unsuitable extinguishing media

None known.

5.2. Special hazards arising from the substance or mixtures

In the event of fire the following can be released: Carbon monoxide (CO).

5.3. Advice for firefighters

5.3.1. Special precautions for firefighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

5.3.2. Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots, and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

6.1.2. For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2. Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air).

Method and materials for containment and cleaning up

Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements, or confined areas. Vacuum or sweep up material and place in a

designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

6.3. References to other sections

See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Observe the precautions on the label.
Change contaminated clothing. Wash hands after working with substance.

7.2. Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
For recommended storage temperature, see product label.

7.3. Specific end use(s)

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

8. EXPOSURE CONTROLS/PERSONEL PROTECTION

8.1. Control parameters occupational exposure limits

Ethanol Denatured, 96% [CAS No: 64-17-5]:
OSHA PEL: 1000 ppm (1900 mg/m^3) TWA
NIOSH REL: 1000 ppm (1900 mg/m^3) TWA
2-Propanol [CAS No: 67-63-0]:
OSHA PEL: 400 ppm (980 mg/m^3) TWA
NIOSH REL: 400 ppm (980 mg/m^3) TWA
NIOSH REL: 500 ppm (1225 mg/m^3) ST

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Form	: Liquid
Odor	: Pine.
Color	: Green
pH @ 25 °C (ca)	: 7,2 +/- 0,4
Melting point/freezing point	: Not determined.
Flash point	: Not applicable.
Evaporation rate	*:* Not applicable.
Upper/Lower Flammability or explosive limits	: Not applicable.
Vapor pressure	: Not determined.
Density	: Not applicable.
Solubility(ies)	: Soluble.
Viscosity	: Not applicable.
Explosive properties	: Not applicable.
Oxidizing properties	: Not applicable.
Decomposition temperature	*:* Not determined.

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

10. STABILITY AND REACTIVITY

10.1. Reactivity

Reactions with strong alkalis and oxidizing agents.

10.2. Chemical stability

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

10.3. Possibility of hazardous

Reactions with strong alkalis 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, metals, nitrile, cyanide salt, oxidizing materials, organic chemicals – combustible.

10.6. Hazardous decomposition products

No dangerous substances are released.

11. TOXICOLOGY INFORMATION

11.1. Information on toxicological effects

11.1.1. Acute toxicity

Ethanol Denatured, 96% [CAS No: 64-17-5]:
LD50 Intraperitoneal – mouse – 528 mg/kg
LD50 Oral – mouse – 3450 mg/kg
LD50 Oral – rabbit – 6300 mg/kg
LD50 Oral – rat – 7060 mg/kg
2-Propanol [CAS No: 67-63-0]:
LD50 Oral – rat – 5840 mg/kg

LD50 Intraperitoneal – mouse – 933 mg/kg
LD50 Dermal – rabbit – 13 g/kg
Linear Alkyl Benzene Sulfonic Acid [CAS No: 85536-14-7]:
LD50 Oral – rat – 1470 mg/kg
LD50 Dermal – rat – >2000 mg/kg
Sodium Laureth Ether Sulfate [CAS No: 68891-38-3]:
LD50 Oral – rat – >5000 mg/kg
LD50 Deri – rat – >5000 mg/kg
Ethylene Diamin Tetra Acetic Acid [CAS No: 60-00-4]:
LD50 Oral – rat – 2580 mg/kg

11.2. Irritation/corrosion

11.2.1. Eyes: Causes burns.

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

No mutagenic effect.

11.5. Carcinogenicity

No known significant effects or critical hazards.

11.6. Reproductive toxicity

No data available.

11.7. Specific target organ toxicity (single exposure)

Not available.

11.8. Specific target organ toxicity (repeated exposure):

Not available.

11.9. Aspiration hazard:

Not available.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Ethanol Denatured, 96% [CAS No: 64-17-5]:
LC50/96h Pimephales promelas: 15300 mg/L
LC50/96h Ceriodaphnia deubia: 5012 mg/L
2-Propanol [CAS No: 67-63-0]:
LC50/96h Pimephales promelas: 9640 mg/L
EC50/24h Daphina magna: 5012 mg/L
Linear Alkyl Benzene Sulfonic Acid [CAS No: 85536-14-7]:
LC50/96h Lepomis macrochirus: 1.67 mg/L
EC50/48h Daphnia magna – 2.9 mg/L
Ethylene Diamine Tetra Acetic Acid [CAS No: 60-00-4]:
LC50/96h Lepomis macrochirus – 41 mg/L
EC50/48h Daphnia magna – 113 mg/L
EC50/16h Pseudomonas putida – 28 mg/L

12.2. Persistence and degradability

Easily soluble in the following materials: water, air.

12.3. Bioaccumulative potential

No applicable.

12.4. Mobility in soil

No data available.

12.5. Result of PBT and vPvB assessment

12.5.1. **PBT:** No

12.5.2. **vPvB:** No

12.6. Other adverse effects:

No known significant effects or critical hazards.

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.

14. TRANSPORT INFORMATION

ADR /RID

ADR/RID Class	**:** 8
UN No	**:** 1760
Packaging Group	**:** II
Shipping Name	**:** CORROSIVE LIQUID, N.O.S. (LINEAR ALKYL BENZENE SULFONIC ACID, SODIUM HYDROXIDE)
Label	**:** 8

Tunnel Code	**:** E

IMDG

IMDG Class	**:** 8
UN No	**:** 1760
Packaging Group	**:** II
Shipping Name	**:** CORROSIVE LIQUID, N.O.S. (LINEAR ALKYL BENZENE SULFONIC ACID, SODIUM HYDROXIDE)
EmS	**:** F-A, S-B

ICAO/IATA

IMDG Class	**:** 8
UN No	**:** 1760
Packaging Group	**:** II
Shipping Name	**:** CORROSIVE LIQUID, N.O.S. (LINEAR ALKYL BENZENE SULFONIC ACID, SODIUM HYDROXIDE)

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 assessment was not carried out.

16. OTHER INFORMATION

Notice to Reader :

The information contained herein in 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.