

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006

MANOCHOL™ EP-70

FR-0059
Revision Date: 04.04.2013
Print Date: 02.01.2017
Revision Number:3

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

1.1. Product Identifier

Product Name : MANOCHOL™ EP-70 Alcohol-Based Hand Disinfectant
Ref No: 6215

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

Skin and hand disinfectant; Alcohol-based hygienic treatment and surgical disinfection of hands.
Formulated for surgical and hygienic hand disinfection.

1.3. Manufacturer:

Company Name : GBL Gül Biyoloji Laboratuvarı Sanayi ve Ticaret Limited Şirketi
Address : Dudullu OSB IMES C Blok 305 Sokak No:16 34766 Ümraniye – İstanbul/ TÜRKİYE
Phone : +90 (216) 364 15 00
Facsimile : +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):

Flammable liquids, Category 2 ; H225

Eye irritation, Category 2; H319

Specific Target Organ Toxicity (single exposure), Category 3; H336

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:

H225 : Highly flammable liquid and vapour

H319 : Causes serious eye irritation

H336 : May cause drowsiness or dizziness.

2.2.4. Precautionary statements:

P210 : Keep away from heat/sparks/open flames/hot surfaces. No smoking

P233 : Keep container tightly closed.

P304+P340 : IF INHALED: Remove person to fresh air and keep 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.

P337+P313 : If eye irritation persists get medical advice/attention.

P403+P235 : Store in a well-ventilated place. Keep cool.

2.3. Other Hazards:

None

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006

MANOCHOL™ EP-70

FR-0059
 Revision Date: 04.04.2013
 Print Date: 02.01.2017
 Revision Number:3

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)
Ethyl alcohol denatured	200-578-6	64-17-5	$\geq 25 - < 50$	Flam. Liq. 2 H225
Isopropyl alcohol	200-661-7	67-63-0	$\geq 25 - < 50$	Flam. Liq. 2 H225, Eye Irrit. 2; H319, STOT SE 3; H336

For the full text of the H-statements mentioned in this section, see Section 16.

For the full text of the R-phrases mentioned in this Section, see Section 16.

SECTION 4. FIRST AID MEASURES

4.1. Description Of First Aid Measures

4.1.1. **Eye Contact:** Get medical attention immediately. Call a poison center or physician.

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes.



4.1.2. **Inhalation:** Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.



4.1.3. **Skin Contact:** Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.



4.1.4. **Ingestion:** Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.



4.1.5. **Protection of first-aiders:** No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006

MANOCHOL™ EP-70

FR-0059
Revision Date: 04.04.2013
Print Date: 02.01.2017
Revision Number:3

mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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

4.2.1. Potential acute health effects

Eye contact: Causes irritation.

Inhalation: mucosa irritations; rapid occurrence of systemic effects after massive vapour inhalation.

Skin contact: no irritation

Ingestion: May cause burns to mouth, throat and stomach.

4.2.2. Over-exposure signs/symptoms

Eye contact: Causes irritation.

Inhalation: no data available

Skin contact: no irritation

Ingestion: no data available

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

4.3.1. **Notes to physician:** no data available

4.3.2. **Specific treatments:** no data available

SECTION 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.

SECTION 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 specialised 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

MANOCHOL™ EP-70

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.

SECTION 7. HANDLING AND STORAGE

7.1. Precautions For Safe Handling:

7.1.1. Protective measures:

Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Spillages should be cleaned up promptly to avoid damage to surrounding materials.

7.1.2. Advice On General Occupational Hygiene:

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2. Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store in corrosive resistant container with a resistant inner liner. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

7.3. Specific end use(s)

7.3.1. Recommendations: Not available.

7.3.2. Industrial sector specific solutions: Not available.

SECTION 8. EXPOSURE CONTROLS/PERSONEL PROTECTION

8.1. Control Parameters Occupational Exposure Limits

Recommended monitoring procedures: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006

MANOCHOL™ EP-70

FR-0059
 Revision Date: 04.04.2013
 Print Date: 02.01.2017
 Revision Number:3

Chemical Name	Exposure Limits					
	TWA ⁽³⁾ (8 h) OSHA PEL		TWA ⁽³⁾ (8 h) NIOSH REL		STEL ⁽⁴⁾ (15 min.)	
	mg/m ³ ⁽⁵⁾	ppm ⁽⁶⁾	mg/m ³ ⁽⁵⁾	ppm ⁽⁶⁾	mg/m ³	ppm
Ethyl alcohol denatured	1900	1000	-	-	-	-
Isopropyl alcohol	980	400	-	-	1225	500

8.2. Exposure Controls

Appropriate engineering controls. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

8.2.1. Individual Protection Measures:

8.2.1.1. Hygiene measure: Wash hands, forearms and face thoroughly after handling chemical product, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

8.2.1.2. 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.

8.2.1.3. Hand Protections: Not applicable.

8.2.1.4. 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.

8.2.1.5. Other 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.

8.2.1.6. 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.

8.2.1.7. Environmental Exposure Controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.



SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information On Basic Physical and Chemical Properties

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006

FR-0059

Revision Date: 04.04.2013

Print Date: 02.01.2017

Revision Number:3

MANOCHOL™ EP-70

Form	: Liquid
Odour	: Fresh plant
Colour	: Colourless
pH @ 25 °C (ca)	: 5,5 +/- 0,4
Melting point/freezing point	: Not determinated.
Flash point	: 13 °C ; 1013 hPa (ethanol)
Evaporation rate	: Not applicable.
Upper/Lower Flammability or explosive limits	: Not applicable.
Vapor pressure	: Not determinated.
Density	: 0,83 +/- 0,03
Solubility(ies)	: Soluble.
Viscosity	: Not applicable.
Explosive properties	: Not applicable.
Oxidizing properties	: Not applicable.
Decomposition temperature	: Not determinated.

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 Hazardous

Reactive 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)
Ethyl alcohol denatured	40-50	6200	> 20000	95,6 mg/l; 4 h (rat)(RTECS)
Isopropyl alcohol	20-30	5045	12800	46,5 mg/l; 4 h(rat)

11.2. Irritation/Corrosion

11.2.1. Eyes: Causes irritaion

11.2.2. Skin: no irritation

11.3. Sensitizer

11.3.1. Skin: no irritation

11.3.2. Respiratory: No data available

11.4. Mutagenicity:

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006

MANOCHOL™ EP-70

FR-0059
Revision Date: 04.04.2013
Print Date: 02.01.2017
Revision Number:3

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**

Components:

Ethanol [CAS No 64-17-5]

LC50 Fish (96 hours)

Minimum: 42 mg/l

Maximum: 14200 mg/l

Median: 11000 mg/l

Study number: 5

Reference: Bengtsson, B.E., L. Renberg, and M. Tarkpea 1984. Molecular Structure and Aquatic Toxicity - an Example with C1-C13 Aliphatic Alcohols. Chemosphere 13(5/6):613-622.

Ethanol [CAS No 64-17-5]

LC50 Crustaceans (48 hours)

Minimum: 3720 mg/l

Maximum: 20700 mg/l

Median: 9280 mg/l

Study number: 20

Reference: Takahashi, I.T., U.M. Cowgill, and P.G. Murphy 1987. Comparison of Ethanol Toxicity to Daphnia magna and Ceriodaphnia dubia Tested at Two Different Temperatures: Static Acute Toxicity Test Results. Bull. Environ. Contam. Toxicol. 39(2):229-236; Ziegenfuss, P.S., W.J. Renaudette, and W.J. Adams 1986. Methodology for Assessing the Acute Toxicity of Chemicals Sorbed to Sediments: Testing the Equilibrium Partitioning Theory. In: T.M. Poston and R. Purdy (Eds.), Aquatic Toxicology and Environmental Fate, 9th Volume, ASTM STP 921, Philadelphia, PA :479-493.

Isopropyl alcohol [CAS No 67-63-0]

LC50 Fish (96 hours)

Minimum: 4200 mg/l

Maximum: 11100 mg/l

Median: 9640 mg/l

Study number: 5

Reference: Brooke, L.T., D.J. Call, D.L. Geiger, and C.E. Northcott 1984. Acute Toxicities of Organic Chemicals to Fathead Minnows (Pimephales promelas), Vol. 1. Center for Lake Superior Environmental Stud., Univ. of Wisconsin-Superior, Superior, WI :414.

Isopropyl alcohol [CAS No 67-63-0]

LC50 Crustaceans (48 hours)

Minimum: 1400 mg/l

Maximum: 1400 mg/l

Median: 1400 mg/l

Study number: 1

Reference: Blackman, R.A.A. 1974. Toxicity of Oil-Sinking Agents. Mar. Pollut. Bull. 5:116-118.

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:**

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006

MANOCHOL™ EP-70

FR-0059
 Revision Date: 04.04.2013
 Print Date: 02.01.2017
 Revision Number:3

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:

13.1.1. Product:

Methods of disposal: The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable treatment. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.



13.1.2. Packaging:

Methods of disposal: The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14. TRANSPORT INFORMATION

	ADR ³ /RID ⁴	ADNR ⁵	IMDG ⁶	ICAO ⁷ /IATA ⁸
UN/ID No.	1987	1987	1987	1987
PRPOER SHIPPING NAME	ALCOHOLS, N.O.S.	ALCOHOLS, N.O.S.	ALCOHOLS, N.O.S.	ALCOHOLS, N.O.S.
CLASS	3	3	3	3
PACKING GROUP	III	III	III	III
CLASSIFICATION CODE	F1	-	-	-
EmS	-	-	F-E; S-D	-
ENVIROMENTAL HAZARDOUS	no	-	No	no
LABEL	3	3	3	3

³ ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

⁴ RID: Regulations Concerning the International Transport of Dangerous Goods by Rail

⁵ ADNR: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways

⁶ IMDG: International Maritime Code for Dangerous Goods

⁷ ICAO: International Civil Aviation Organization

⁸ IATA: International Air Transport Association.

SECTION 15. REGULATORY INFORMATION

15.1. Safety, Health And Environmental Regulations/Legislation Specific For The Substance Or Mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Regulation (EC) No. 1272/2008 [CLP/GHS]

The European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)

Regulations concerning the International Carriage of Dangerous Goods by Rail (RID)

International Maritime Dangerous Goods Code (IMDG CODE)

Technical Instructions for the Safe Transport of Dangerous Goods by Air(IATA DGR)

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006

MANOCHOL™ EP-70

FR-0059
Revision Date: 04.04.2013
Print Date: 02.01.2017
Revision Number:3

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.

Regulation of the Minister of Labour and Social policy of 29 November 2002 on maximum permissible concentrations and levels of factors harmful to health in the working environment (Journal of Laws (Dz. U.) No. 217, item 1833) as amended.

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives

15.1.1. **Annex XIV - List of substances subject to authorization**

None of the components are listed.

15.1.2. **Substances of very high concern**

None of the components are listed.

15.1.3. **Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles**

Not applicable.

15.2. **Chemical Safety Assessment**

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

SECTION 16. OTHER INFORMATION

Indicates information that has changed from previously issued version.

16.1. **Abbreviations and Acronyms:**

ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

DEL = Derived effect levels

DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement

Date of issue/ Date of revision : 04.04.2013/02.01.2017

Version : 3

UPDATES SINCE PREVIOUS VERSION: *Implementation of classification and labeling in compliance with EC regulation 1272/2008.*

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.