

REPORT BIOLOGICAL ACTIVITY TEST RESULTS REPORT

REPORT REGISTRATION NO AND DATE: 43-MD-2012

30.04.2012

SAMPLE REGISTRATION NO: 2012-049

THE SAMPLE WAS SENT BY: Governorship of Istanbul, Provincial Directorate of Health

NAME AND ADDRESS OF THE MANUFACTURER COMPANY OF THE SAMPLE: Gül Biyoloji

Laboratuvarı Sanayi Ticaret Limited Şirketi

MARKETING AUTHORIZATION HOLDER: Gül Biyoloji Laboratuvarı Sanayi Ticaret Limited Şirketi

TEST PURPOSE: Biological Effectiveness

TEST CONDUCTOR: Yeditepe University, Faculty of Engineering Department of Genetics and Bioengineering

DENEY DATE: 26.04.2012/28.04.2012

NAME OF THE TESTED PRODUCT: MANOCHOL EP-70 Alcoholic Hand Disinfectant

TYPE OF THE TESTED PRODUCT: Biocide

COMPOSITION OF THE PRODUCT: Ethyl Alcohol % 45, İsopropyl Alcohol % 25

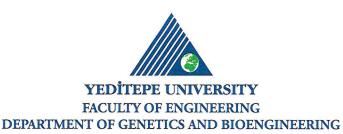
TESTING METHOD: NCCLS M2-M9, NCCLS M44-A

ENVIRONMENT CONDITIONS FOR THE TEST: Bacteria: 37 °C, Yeast: 37 °C, Fungus: 25 ± 3°C

RESULTS: They are presented in the attached table

COMMENT: Biocidal product samples named as "MANOCHOL EP-70 Alcoholic Hand Disinfectant", sent by "Governorship of Istanbul, Provincial Directorate of Health" were received on 25.04.2012 to conduct biological activity analysis. The product was tested on 15 different microbial species, listed in the appendix, (13 bacterial, 1 Yeast, 1 Fungal species) in Yeditepe University, Faculty of Engineering, Department of Genetics and Bioengineering. According to the results obtained, the biocidal product named as "MANOCHOL EP-70 Alcoholic Hand Disinfectant" which was examined for its biological activity was found to exert antimicrobial activity on all microorganisms tested.

Prof. Fikethin Senators



ANTIMICROBIAL TEST RESULTS CONTROL **SAMPLE TEST DATE: 26.04.2012 GROUP NAME** BIOLOGICAL PC **ACTIVITY** MANOCHOL (Ofloxacin) NAME OF MICROORGANISM **EP-70** (Nystatine) (mm) (mm) Escherichia coli ATCC 25922 28 12 + Staphylococcus aureus ATCC 25923 24 10 Enterococcus faecalis ATCC 29212 18 10 Pseudomonas aeruginosa ATCC 27853 18 8 MRSA(Methicillin-resistant Staphylococcus aureus) 22 10 VRE(Vancomycin-resistant Enterococcus) 10 10 Klebsiella pneumoniae ATCC 13883 32 12 Yersinia enterocolitica ATCC 27729 30 10 + Proteus vulgaris ATCC 13315 20 8 Bacillus cereus ATCC 11778 18 10 Enterococcus faecium 16 8 Listeria monocytogenes ATCC 15313 16 10 Acinetobacter baumannii 12 10 Candida albicans 20 10 +

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Aspergillus niger