

ABOUT SANİTER

Saniter Food-Environmental Science LLC is the first independent water, food and cosmetic and medical testing laboratory which is accredited by TURKAK according to ISO 17025. We have been serving Turkish and International clients since 1994 in the areas of microbiological and chemical analysis of food-water-air hygiene and safety at schools, homes, hotels and offices.

Our other Accreditations;

- TS EN ISO17025 Laboratory Accreditation
- TS EN ISO 17020 Inspection Accreditation
- Turkish Agricultural Ministry Private Food Control Laboratory License
- Turkish Health Ministry Pool Water Control Laboratory License

The company employs 28 staff and provides analytical research and consultancy services to a range of clients, from small producers to blue chip manufacturers and major retailers throughout the world.

We analyze food and food products, water, medical products and cosmetics, for chemical, microbiological and other physical contaminants. In addition, we test recreational bathing waters, such as; swimming pools, whirlpools, hot tubs, lakes, and beaches for bacteria and chemicals. We also help to develop and implement HACCP plans for the food industry.

With more than decades of involvement in these fields, we would like to share our experience, expertise and valuable insight in these branches of environmental science, food science and public health.

We are the problem solvers, advisors, consultants, trainers, and one of the largest full-service food and industrial testing laboratories in TURKEY.

We offer a wide range of technical advice and consultation to the food industry.

Additionally, we perform:

- Customized Research Solutions
- Product Safety and Quality Solutions
- Nutritional Labeling Solutions
- Foreign Material Identification.

Saniter has been the unique approved Laboratory of Kraft Co. and Master Food in Turkey since 1998.

We use international analysis methods such as: **AOAC, CCFR, FAO, FDA-BAM, AOCS, AFNOR, APHA, EPA, ASTM, TSE, USPh, EPh.**

We comply with the following consultant and inspection services, and standards:

- Food and Agricultural Organization (FAO) Codex Alimentarius CAC/RCP 1-1969, Rev.4 (2003),
- Europe Union (93/43/EEC), (93/94/EC) Hygiene Standard.
- IFS (Int. Food Standard)-Standard for Auditing Retailer (and Wholesaler) Branded Food Products Ver.5, August 2007,
- ISO 22000-Food Safety Management Systems.
- WHO 2006 Guidelines for safe recreational water environments.
- WHO 2007 Legionella and the prevention of legionellosis.
- ISO 14698-1, ISO 14698-2 Clean Rooms
- Hygiene and sanitation controls for cosmetic production facilities.

OUR MISSION

With an impartial and ethical approach, we would like to create a shared awareness of food safety and public health.

OUR VALUES

Our values are to be scientific, reliable, impartial and ethical.

1-FOOD ANALYSIS

FOOD MICROBIOLOGY

Ensuring the microbiological safety and quality of your food products is of critical importance to food companies. Saniter is highly skilled in the microbiology food.

Saniter experienced analysts can identify pathogenic organisms in food using international approved methods such as ISO, FAO, CCFRA for pathogen analysis. Since the quality of food is as important as its safety, we also test for general microbial population and food spoilage organisms are conducted.

We conduct microbiological analysis on canned foods for commercial sterility.

As the food industry is under pressure from both regulatory agencies and consumers to reduce the presence of pathogens such as *E. Coli 0157:H7*, *Listeria monocytogenes*, *Salmonella*, *Staph. aureus* and some lesser known but still important microorganisms such as *Bacillus cereus*, and *Campylobacter jejuni* in food

products, a microbiological sampling plan of both product and the environment may be prudent, even if not required.

To ensure the quality of your products it is also advised to perform microbiological analysis for indicator and spoilage organisms such as Aerobic Plate Count, Anaerobic Plate Count, Coliforms, *E. Coli*, Yeasts, Molds or *Lactobacillus*.

Our Lab founder partner, Funda Senturk, has more than 30 years of microbiological testing experience. Our current staffs of more than 20 employees include 8+ registered microbiologists. You'll be pleased to find that Saniter maintains a high level of quality, capabilities and accessibility for its clients.

We conduct analyses on the below bacteria:

- Aerobic Plate Count
- Anaerobic Plate Count
- *Bacillus cereus*
- *Clostridium perfringens*
- Coliforms (MPN)
- Total Coliforms (Petrifilm™)
- *E. coli* O157:H7
- *Enterobacteriaceae*
- Fecal *Streptococcus*
- Lactic Acid Bacteria
- Bacterial ID
- *Campylobacter*
- *Clostridium botulinum*
- *Listeria*
- *Pseudomonas*
- Psychrotropic bacteria
- *Salmonella*
- *Shigella*
- Spores
- *Staphylococcus aureus*
- *Yersinia*
- Yeast and Mold
- Environmental monitoring program
- Commercial Sterility
- *E. coli* O157:H7
- *Staphylococcal* Toxins

FOOD NUTRITION ANALYSIS

We are also able to analyze for other nutrients of interest such as Trans Fatty Acids, mono- and poly-unsaturated fats such as Omega-3 and Omega-6, Potassium, Phosphorus and Magnesium and those nutrients that may affect the Net Carbonhydrate count of your products, such as Fiber, both soluble and insoluble and Sugar Alcohols.

FOOD CHEMICAL ANALYSES

Some of the food chemical analyses are below:

- Ash
- Dry Matter
- Moisture
- Ammonia-N
- Heavy metals
- Maximum Internal Temperature
- Moisture/Protein Ratio
- Nitrate
- Nutritional Analysis & Labeling
- Percent Bone

- Calcium
- Calories (by calculation)
- Calories From Fat
- Carbohydrates (by calculation)
- Collagen
- Crude Fiber
- Fat (Soxhlet)
- Fatty Acid Content (Saturated, Unsaturated, *Trans*)
- Hydroxyproline
- Mycotoxins
- Oxidative Rancidity
- Pesticide Residue
- pH
- Phosphate
- Protein
- Protein Fat Free Calculation
- Salt
- Sodium Nitrite
- Soy Protein Concentrate
- Thiobarbituric Acid Reactive Substances (TBA)
- Unknown Compound Identification

AND MORE...

Some Examples of Our Instruments:

High Performance Liquid Chromatography (HPLC/UV) (HPLC/RI) (HPLC/FLD)
 Gase Chromatography (GC/FID) Head Space (GC/ECD)
 ICP/MS Mass Spectrometry
 IR-UV-VIS Spectrometry
 Tempo-Vidas for microbiology
 and more...

2-MEDICAL DEVICE ANALYSIS

- Sterility Testing
- Reusable Device Analysis
- Bioburden Testing
- Contact Lens & Solution Testing
- AOAC Disinfectant Testing
- Bacterial Endotoxin
- Zone of Inhibition Testing
- Fungus Resistance Testing
- Microbial/Fungal Identification
- Device Particulate Testing
- BI Reduction Studies
- Package Validation
- Controlled Environment Testing
- Sterilization Residual Analysis
- Biocompatibility
 - Ethylene Oxide Residuals in Materials/Devices
 - Shelf Life Studies, Accelerated Aging, Seal Integrity

- Water Analysis (U.S.P. Guidelines)

We specialize in microbiology testing for the medical device and pharmaceutical industries. Saniter has ISO 17025 certified.

Our current lists of test services include more than 40 test offerings for medical device and pharmaceutical products. These include microbiological testing, sterilization validations, routine lot release tests (sterility, bioburden, B/F etc.), residuals, filter validations, biocompatibility, reprocessed device validations and much more.

Our constant goal has been to maintain the highest in quality testing services and technical expertise. We hope you will have a chance to experience the Saniter difference. We are sure you will be impressed.

Standards Expertise: We have a variety of teams focusing on the following topics: radiation sterilization, ethylene oxide sterilization, biological evaluation, microbiological methods, biological indicators, reusable devices, packaging, cleanrooms, and protective barriers.

Hospitals, manufacturers of hospital and medical supplies, museums, libraries and archives, food processors, sterilization training institutions, veterinary hospitals and clinics, animal laboratories and herbaria may use ethylene oxide as a sterilizing or fumigation agent. A number of methods are available for monitoring employee exposures to ethylene oxide. Most involve the use of charcoal tubes and sampling pumps, followed by sample analysis using gas chromatography. Some of the essential differences in charcoal tube methods include; the use of different desorbing solvents; the use of different lots of charcoal and the use of different equipment for different sample analysis. A very long and difficult process with results usually based in the high ppb to low ppm range.

Whole air samples are analyzed with state-of-the-art cryo-focusing and advanced GC/MS technology. The samples are in-theory frozen and quickly injected for maximum resolution. This analytical process allows for sub-parts per billion (ppb) detection limits.

3-PRODUCT TESTING

Product testing includes the microbiological analysis samples requiring testing for microbial components. These tests are specific for the type of product being tested and generally include analysis for microorganisms either common to the product or contaminants of the product. Product testing may include testing for various pathogens such as *E. coli*, *Staphylococcus*, and *Salmonella*. Additionally, product testing may involve shelf life testing.

Packaging & Materials Analysis

Volatiles in Food Package

Packaging materials and adhesives can outgas volatile compounds into foods and beverages. Even low levels of these compounds can change the flavor of the product or even create a health risk.

Food & Ingredients Analysis

Analysis of Chemical Markers in Foods and Ingredients

The composition of volatiles in the headspace of foods and ingredients has shown to change as spoilage occurs. Microbial growth in food products produces unique compounds in the headspace that can be compared to normal headspace components to estimate the extent of spoilage.

Flavor & Fragrance Analysis

Volatiles in Flavors and Fragrances

Many variables need to be taken into account such as analytical methods, absorbents and thermal breakdown on protein or sugar containing samples. Large Volume Static Headspace (LVSH) addresses these limitations. Sample preparation is not required other than placing the product in the LVSH chamber.

Aluminum Can Analysis

Volatile Compounds from Can Coatings

Polymer coated aluminum and steel cans are used throughout the world for packaging foods and beverages. It is known that the different coatings and curing process used can impact the food products in contact with these coatings.

4- COSMETIC ANALYSIS

Some of the cosmetic analyses are below:

PHYSICAL & CHEMICAL ANALYSES

- Paraben
- Fitalat
- SLS
- SLES
- Color
- Smell
- Appereance
- Ph
- Density
- Viscosity
- Anionic and Cationic Active Matter

- Total Active Matter
- Heavy Metals (Lead, Cadmium, Mercury, Arsenic)
- Quality Control Analyses (Ammonia, NaOH, Citric Acid etc.)
- Soap, Acid Indi Number etc. Analyses

MICROBIOLOGIC ANALYSES

- Challenge
- Shelf Life
- Aerobic Mesophilic Bacteria
- Mould - Yeast
- Staphylococcus Asureus
- Pseudomonas Aeruginosa
- Candida Albicans
- E.coli
- Bacillus Cereus