

ABOUT US:

Eurochem Laboratories is an ISO 9001:2015 certified Laboratories our mission is to stay in the forefront of complete Food and Water Testing Services by offering dependable and cost effective services which seamlessly plug into our Customers' target. Our services are backed by sound scientific knowledge, excellent infrastructure and a skilled team.

Eurochem Laboratories are base in Rajkot (Gujarat) and it provides quality services to Our Society People, Government Organizations, Private limited companies, Medium, Large Industries, Institutions and students projects etc. The main aim is to provide Consistent Quality services to the valuable clients at all times by continuously improving the processes, infrastructure, providing continuous training to the people on the job, updated technical input, and to grow to the international level.

Eurochem Laboratories provides high quality Analytical Services by meeting all customer requirements in accordance with regulatory, statutory and ISO, FSSAI Standards, BIS, GPCB/CPCB.

We are committed to:

- Provide our customers the best analytical services through adequate facilities and by adopting National / International standard test methods.
- Ensures that all personnel are qualified and are well aware of laboratory management system required to produce accurate, reliable and consistence results at all times.
- Continuous improvement of effectiveness of management system
- Awareness of laboratory personnel through training for understanding and implementing quality system documentation.
- Eurochem Laboratories also ensures all operations with the laboratory are compliant with defined policies, procedures and safe laboratory practices.

Why Water Quality Testing..??

- **Water is a Necessity for Life**, and as such that necessity needs to be protected.
- Water quality varies from place to place, depending on the condition of the source water from which it is drawn and the treatment it receives.
- In the whole world, a majority of the people rely on the private water supply. This includes ponds, dugouts and wells. A superior quality of water is crucial to the economic, health, and social well-being of the people. Monitoring the quality of your water and testing it regularly is very important to maintain reliable and safe water sources and eliminate the potential health risks related to water contamination.
- Water is used for different purposes with various chemical or mineral compositions depending upon the requirements. For the composition and purity, each body of water needs to be analyzed at regular intervals to confirm suitability of the water quality before and after its use for the purpose like Drinking, Domestic, Irrigation, Industrial processing, food processing, or spraying. It will also help you in making an informed decision about how to use the water and what should be done about its purity.
- EUROCHEM LABORATORIES Provides Water testing as per methods prescribed by respective authorities like BIS, FSSAI, GPCB/CPCB and WHO for high quality water testing to help you identify problems with your water.
- EUROCHEM LABORATORIES can serve you with physical, chemical & Microbiological analysis of following types of Water:
 1. Raw Water
 2. Drinking water
 3. Packaged Drinking Water
 4. Mineral Water
 5. R.O. Water
 6. Alkaline Water
 7. Distilled Water
 8. Soft Water
 9. Food Processing Water
 10. Boiler Water
 11. Cooling Tower Water
 12. Construction Water
 13. Industrial Processed Water
 14. Agriculture Water
 15. Industrial Waste Water (ETP)
 16. Residual Waste Water (STP)
 17. Swimming Pool Water
- Water testing can be done using several methods, all of which are highly advanced to provide accurate information about the quality of water, our state of art infrastructure and lab technicians make us the top choice of such work.
- If you wish to have water testing in labs, Contact us today...

Importance of Food Product Testing...

- All food should be safe and free from contamination and spoilage at all points in its journey from its source until it reaches the consumers. However, food contamination is a serious public health problem in India, resulting in foodborne diseases that affect many people every year. Hence, awareness of potential sources of food contamination is an important component of good nutrition and good health.
- Food safety has become an important public health issue and food product testing is vitally necessary to ensure that the food is free of physical, chemical, and biological hazards. Food testing laboratories play an important role in keeping you safe from health hazards. In recent years both intentional and unintentional adulteration has become high-tech and state of the art testing laboratories can help to detect these adulterants.
Therefore one of the functions of the food testing laboratories is to test foods for
 - ◆ Adulterants
 - ◆ Pathogens
 - ◆ Pesticide residues
 - ◆ Chemical contaminants
 - ◆ Microbial contaminants
 - ◆ Non-permitted additives, colors etc.
 - ◆ Preservatives
 - ◆ Antibiotics in food
- For Packaged Foods Food labeling is vital. Not only is it a legal requirement if you're a food producer, it also helps consumers make informed decisions when purchasing food and helps them to store and use the food they've purchased safely. Whether you supply restaurants or supermarkets, the requirements are the same. Therefore, it's important you understand your responsibilities and why food packaging is important.
- Eurochem Laboratories doing accurate Analysis of
 - * Analytical chemistry Testing,
 - * Nutritional analysis & Labeling,
 - * Shelf-life Testing,
 - * Sensory Evaluation,
 - * Microbial Analysis,
- Eurochem Laboratories also help to make an assessment of the hygiene and sanitation conditions in food preparation and processing premises to ensure hygienic standards are being maintained according to the requirement of the FSS Act, 2006
- As a food manufacturer or processor if you have a requirement for food and water testing we could partner you in your endeavors.

Milk & Milk Products...

- **Milk** is one of the most nutritious drinks in the world and it has long been considered as a wholesome food. Milk is a good source of many essential nutrients including calcium, protein, Carbohydrates, vitamins, minerals and Fats.
- Milk and milk products provide a wealth of nutrition benefits. But many times raw milk is milk from cows, buffaloes, sheep, or any other animals can harbor dangerous bacteria such as Salmonella, E. coli, Listeria, Campylobacter, and others that can cause foodborne illness, often called “food poisoning.” and it creates serious health risks to you and your family.
- Milk is so highly valuable a food, but it is very easily adulterated throughout the world. Possible reasons behind it may include demand and supply gap, perishable nature of milk, low purchasing capability of customer and lack of suitable detection tests. So some malpractice is done by adding cheaper and resembling substance substances to milk or removing valuable constituents from it in order to make an extra profit.
- Milk is made up of three components...

Natural Milk Composition		Artificial Milk (Adulteration)
Water (85.5%-89.5%)	Water	Water
Total Solid (10.5%– 14.5%)	Fat (Butter Fat)	Palm oil, Animal body fat, sesame oil, Groundnut oil, vegetable oil, Mineral oil, cottonseed oil etc.
	SNF (Proteins, Lactose, Minerals, Etc.)	sugar, starch, urea, Ammonia, sulphate, glucose, salt, Malto-dextrin, SMP, hydrogen peroxide, Boric acid, detergents, Nitrates (Pond Water) etc.
*So many other chemical, oils and preservatives can also added in natural milk for increase shelf-life of milk like Potassium dichromate, formalin etc.		

Ghee:

- Ghee is a Fat portion of milk, it contains more than 99% of Fat.
- The adulteration of ghee can start at the stage of milk itself. Water emulsion of coconut, groundnut and other cheap oils are added to milk or cream. On souring and churning, these transfer to butter, and thus on boiling of butter or cream pass on to ghee.
- Several Quality standards and tests have been developed from time to time to maintain quality and detect adulteration in milk and milk products.
- Apart from milk, other milk & dairy products testing are done in Eurochem Laboratories like
 - ✓ Milk analysis
 - ✓ Butter milk & Curd analysis
 - ✓ Butter & Cream analysis
 - ✓ Ghee analysis
 - ✓ Ice cream, Kulfi, Frozen Dessert analysis
 - ✓ Cheese & Paneer analysis
 - ✓ Other Milk & Dairy products like Shrikhand and Sweets,
- Eurochem Laboratories is well equipped to test milk and all other dairy products testing. With proven methods and more you can be assured of the quality of your milk which you are consuming in the daily routine. Be sure that what is being consumed should be non-adulterated and chemical-free.

Edible Oil Analysis....

- All over the world, people have started diversifying oilseed cultivation to better match modern day's health, nutritional and taste requirements.
- Oil is popularly derived from oilseeds like groundnut, soybean, sunflower, rapeseed mustered, cotton seed, etc., various tree fruits (like coconut, palm, olive, etc.) are also reliable sources for oils; in fact, fruit sources provide higher yielding. Oil, derived from such vegetable sources, is called vegetable oil.
- However, every vegetable oil may not necessarily be suitable for human consumption and thus they are used industrially. Moreover, commercial value of certain edible oils is better for industrial usage, for example castor oil.
- As the name suggests, **edible oils** are beneficial for human consumption and are popularly used for such purpose. They have high nutritional value and less industrial demand. Such oils also require less processing to make it safe and hygienic for health. Majority of vegetable oils come under edible oil; however not all.
- Edible oils are directly extracted from oilseed grains, nuts and tree fruits. Thus their sources are predominantly organic,
- Edible oil extraction process must be hygienic with highest level of purity. Any deviation may cause alteration with toxic elements or bacterial infection that can make the oil unsafe for human consumption. Tight quality control requirement along with higher demands and limited production made edible oil costlier.
- Edible oils must be rich in nutrition; ideally such oils should be digestible, rich in caloric value and free from unsaturated fat. Most edible oils are actually healthy fat and don't contain any toxic component like lectin that can pose a risk on human health. Oils help absorbing fat soluble vitamins (A, D, E, and K) and also provide other benefits.
- The quality of edible oil is vital for healthy, safe and sound life. Quality tests are also required for getting complete information about the contents present in edible oil. For selling in market or importing/exporting of edible oils the company has to submit the complete oil analysis report to the regulatory body.
- There are various parameters on which these Edible oils are tested,
 - ✓ Moisture & Insoluble Impurities
 - ✓ Total Fatty Acids
 - ✓ Refractive Index & BR.
 - ✓ Specific gravity
 - ✓ Saponification value
 - ✓ Iodine value
 - ✓ Acid value
 - ✓ Unsaponifiable matter
 - ✓ Hexane
 - ✓ Test for the presence of argemone oil
 - ✓ Adulteration of other oil
 - ✓ Nutritional analysis & Labeling
- **Eurochem Laboratories** provides complete testing services for all types of edible oils as per Food Safety & Standard Regulations.

Cereals & Cereal Products...

- Cereals are very familiar products in everyday life. Cereals are understood as all types of seeds from plants used for food such as wheat, rice, sesame, beans... Cereal flour is very nutritious but low in calories and fat. Therefore, not only normal people, cereals are suitable for everyone.
- Cereals are nutritionally important sources of dietary protein, iron, vitamin B complex, vitamin E, carbohydrates, niacin, riboflavin, thiamine, fibre and traces of minerals important for both humans and animals. Soluble bran in cereals is also helpful for lowering blood cholesterol levels and also prevents cardiovascular diseases. Cereals also help to prevent cancer, constipation, colon disorders and high blood sugar. When breakfast cereals combine with milk, they provide protein rich food. For infants iron fortified cereals are used as premium solid foods.
- Cereals are generally treated with insecticide to prevent infestation during storage. These insecticides present in cereals can be very harmful for the health of consumers. The cereals are tested for their compliance to maximum residue levels.
- During the production process, from raw material to final product, many steps need controlling and monitoring to reach safe and high quality products
- There are various parameters on which these cereals are tested,
 - ✓ Foreign Matter
 - ✓ Moistures
 - ✓ Total Ash
 - ✓ Acid Insoluble Ash
 - ✓ Gluten
 - ✓ Alcoholic acidity
 - ✓ Protein
 - ✓ Crude Fiber
- Eurochem laboratory is fully equipped with world-class instruments to examine the above parameters for Cereals and Cereal product testing.

Spices, Herbs & Condiments...

- It's hard to imagine cooking without spices and herbs.
- Spices, Herbs and condiments are known as one of the most remarkable ingredients of the many styles of cuisine in the world.
- **SPICES**- are a seed, fruit, root, bark, or other plant substance primarily used as a flavoring, coloring or preserving agent in food. Ex Pepper, saffron, cardamom, coriander, ginger, chili powder, cumin, turmeric, paprika, garlic etc.
- **HERBS**-are the fresh or dried leaf part of a plant that is used in cooking. Ex oregano, coriander, methi, basil etc.
- **CONDIMENTS**-shall be a prepared food compound, containing one or more spices or spice extractives, it added to a food after food has been served, for enhances the flavor of food". Ex salt, pickle, sauce, ketchup, chutney, vinegar etc.
- Spices and herbs are not only enhancing the flavour and aroma of food but they have numerous health benefits too. Research shows that spices and herbs possess anti-inflammatory, antioxidant and anti-carcinogenic it also improves immunity, digestion and metabolism.
- India is known as the home of spices & herbs, producing a lot of varieties all around in the country in different weather conditions that are specific to the type of spice & herb cultivated.
- Spices & herbs quality depend on a number of factors like changes in the weather, or any contamination in the entire process of production to packing that can largely affect the quality of products
- To ensure that the quality of spices & herbs are maintained as per set standards and that they are safe from any contaminants like foreign particles, metals, and other adulterations, spice & herb testing is done to maintain the quality and its true taste and ensures that your product meet the national standards and international standards for export as well..
- **EUROCHEM LABORATORIES** offers complete testing facilities for the following Spices, Herbs & Condiments...
 - ✓ Chilies & Capsicum
 - ✓ Coriander (Dhania)
 - ✓ Cumin (Zeera)
 - ✓ Turmeric (Haldi)
 - ✓ Salt
 - ✓ Cardamom
 - ✓ Ginger (Adrak)
 - ✓ Mustard
 - ✓ Pepper Black
 - ✓ Saffron
 - ✓ Mixed Masala,
 - ✓ Pickle, Sauce, Ketchup, Chutney, etc.
 - ✓ Nutritional analysis & Labeling
- **EUROCHEM LABORATORIES** has a facility for testing spices across different safety and quality specifications as per food safety and standards regulations.

Beverages (Non Alcoholic)...

- A beverage is any product that is used as a drink, for the purpose of relieving thirst and introducing fluids in the body, nourishing the body and stimulating or soothing the individual.
- The beverages can be classified as follow:
 1. **Non-alcoholic Beverages.**
 - Carbonated beverages. e.g. soft drinks
 - Non-carbonated beverages. e.g. tea, coffee, cocoa
 2. **Alcoholic Beverages.**
 - Carbonated beverages. e.g. beer
 - Non-carbonated beverages. e.g. wine
- **A beverage or a drink meaning is a form of liquid used for subsistence, energy, or hydration.** The number of beverage types has been increasing over time with more variety of flavors and tastes. When it comes to finding a beverage, we tend to have a longer list.
- **Non Alcoholic beverages** include the fruit juices, tea, coffee, cocoa/chocolate drinks etc. In order to enhance their thirst quenching and refreshing properties, some drinks are carbonated. Carbonated fruit based drinks are new age beverages which provide nutritional elements of the fruit along with natural colour and flavour in addition to carbonation effects.
- To meet the growing demands and quality standards prescribed by various regulatory bodies, it becomes imperative to monitor the composition, consistency, additives, nutritional values, and adulteration or contamination for non-alcoholic beverages.
- Backed with an accredited food testing laboratory, leading-edge equipment, and a team of knowledgeable technicians, **EUROCHEM LABORATORIES** offers complete testing facilities for the following beverages:
 - ✓ Fruit & Vegetable Based Juices
 - ✓ Milk Based Beverages
 - ✓ Carbonated Water (Soda)
 - ✓ Carbonated Fruit Beverages
 - ✓ Soft Drinks
- All tests and analyses are performed with respect to the standards laid down by FSSAI 2011 and other National/ International standards. Our services involve testing of beverages for the following parameters:
 - ✓ Quality Parameter
 - ✓ Physico-Chemical Properties
 - pH Value
 - Total Soluble solids
 - Added Sugar
 - Sodium Saccharin
 - Acesulfame-K
 - Aspartame (Methyl ester)
 - Sucralose
 - Caffeine
 - Synthetic colors
 - ✓ Microbiological Parameters
 - ✓ Nutritional Profile
 - ✓ Contaminants.