



## MICROBIOLOGICAL ANALYSIS

Product	TAT	Method	
<b>FOOD</b>			
<i>Bacillus Cereus</i>	5 days	ISO 7932	
<i>Clostridium Perfringens</i>	5 days	ISO 7937	
<b>Coliforms</b>	3 days	ISO 4832	
<i>Escherichia Coli (E. Coli)</i>	2 days	ISO 16649-2	
<b>Enterobacteriace</b>	3 days	ISO 2528-2	
<b>Enterococci</b>	5 days	Compendium 2001	
<b>Fecal Streptococci</b>	5 days	Compendium 2001	
<i>Listeria sp</i>	6 days	ISO 11290-1	
<i>Listeria monocytogenes</i>	6 days	ISO 11290-1	
<i>Pseudomonas sp</i>	4 days	ISO 13720	
<i>Salmonella sp</i>	6 days	ISO 6579	
<i>Shigella sp</i>	6 days	Compendium 2001	
<i>Staphylococcus aureus</i>	4 days	ISO 6888-1	
<b>Spore Former ( Anaerobic)</b>	3 days	ISO 4833	
<b>Spore Former (Aerobic)</b>	3 days	ISO 4833	



<b>Sulfite Reducing Bacteria (Spore)</b>	3 days	ISO 15213	
<b>Thermo Tolerant Coliform Bacteria</b>	3 days	NMKL 1996 3 <sup>rd</sup> Edition	
<b>Total Plate Count</b>	3 days	ISO 4833	
<b>Total anaerobic bacteria</b>	3 days	ISO 4833 modified	
<b>Warm or parasite detection</b>	2 days	Microscopic examination	
<b>Yeasts &amp; Moulds</b>	3 days	ISO 21527 modified	
<b>WATER</b>			
<b>Coliforms</b>	3 days	SMWW 2012	
<b><i>Escherichia Coli</i> (E. Coli)</b>	2 days	SMWW 2012	
<b>Fecal Coliform</b>	3 days	SMWW 2012	
<b>Fecal Streptococci</b>	5 days	SMWW 2012	
<b>Legionella</b>	14 days	ISO 11731-2	
<b><i>Pseudomonas aeruginosa</i></b>	5 days	SFS EN 12780	
<b>Total Plate Count at 30 °c</b>	3 days	ISO 4833	
<b>Protozoa</b>	<b>3 days</b>	<b>SMWW 2012</b>	



## Mycotoxin analysis

Product	TAT	Method	
<b>FOOD</b>			
<i>Aflatoxin total (G1,G2;B1;B2)</i>	4 days	Elisa	
<i>Aflatoxin B1</i>	5 days	Elisa	
<i>Aflatoxin M1</i>	3 days	Elisa	
<i>DON</i>	3 days	Elisa	
<i>Z toxin</i>	<b>3 days</b>	<b>Elisa</b>	

## Authentication: adulteration And GMO analysis

Product	TAT	Method	
<b>FOOD</b>			
<i>Meat &amp; pork</i>	4 days	R-PCR	
<i>Meat &amp; horse</i>	5 days	R-PCR	
<i>Meat content %</i>	3 days	R-PCR (LOQ 20%)	
<i>GMO</i>	<b>5 days</b>	<b>R-PCR</b>	



## Visual inspection & sensory evaluation

Product	TAT	Method	
<b>FOOD</b>			
<i>Test sample by attributed parameter</i>	2 days	<i>Visual or microscopic</i>	
<i>sensory evaluation</i>	14 days	Expert testers	
<i>physical parameters</i>	3 days	<i>physical</i>	
<b>Particle size</b>	<b>2days</b>	<b>ASTM/ ES /AOAC</b>	

## CHEMICAL ANALYSIS

Product	TAT	Method	
<b>EDIBLE OILS &amp; FATS</b>			
<b>Acid Value</b>	2 days	AOCS	
<b>Alkalinity</b>	2 days	AOCS	
<b>Ash</b>	2 days	AOCS	
<b>Cold Test</b>	2 days	AOCS /ES	
<b>Free Fatty Acid (Acidity)</b>	2 days	AOCS/ ES/ ISO 660	
<b>Impurities</b>	2 days	AOCS/ ES	
<b>Iodine Value</b>	2 days	AOCS/ ES	
<b>Moisture</b>	2 days	AOCS/ ES	
<b>Peroxide Value</b>	2 days	AOCS/ ES	
<b>Saponification Value</b>	2 days	AOCS/ ES	



<b>Slip Melting Point</b>	2 days	AOCS/ ES	
<b>Unsaponifiable Matter</b>	2 days	AOCS/ ES	
<b>Color</b>	2 days	AOCS/ E.S	
<b>Soap content</b>	2 days	AOCS/ E.S	
<b>p-Anisidine value</b>	3 days	AOCS	
<b>Rancidity</b>	2 days	B.S/ AOCS	
<b>SUGAR</b>			
<b>Ash</b>	2 days	AOAC/ E.S	
<b>Acidity in Honey</b>	2 days	ES	
<b>Insoluble Matter</b>	2 days	ICUMSA/ ES(honey)	
<b>Invert Sugar</b>	2 days	ES	
<b>Loss on Drying</b>	2 days	ICUMSA (white sugar)	
<b>Moisture in Honey</b>	2 days	AOAC/ ES	
<b>Reducing Sugar ( Molasses)</b>	2 days	ICUMSA	
<b>Reducing Sugars (White Sugar)</b>	2 days	ICUMSA	
<b>Reducing Sugars (Honey)</b>	2 days	ES	
<b>Sucrose</b>	2 days	AOAC	
<b>Total Sugars as Invert (Molasses)</b>	2 days	AOAC	
<b>Total Insoluble Solids (Honey)</b>	2 days	ES	
<b>Total Solids (Molasses)</b>	2 days	ES	



## CEREALS & CEREAL GRAINS

Acid Insoluble Ash	3 days	ES	
Ash	2 days	ICC 104/AOAC/ ES/ ISO	
Crude Fiber	2 days	AOAC/ ES/ GAFTA	
Fat	3 days	AOAC/ES	
Fat Acidity	3 days	AOAC/ ES	
Moisture	2 days	ICC110/ ISO712/ AOAC/ES/GAFTA	
pH Value	2 days	AOAC	
Protein	2days	AOAC/ES	
Wet Gluten	2 days	ISO 7495/ ICC 106	

## ANIMAL FEED

Acid Insoluble Ash	3 days	GAFTA	
Ash	2 days	AOAC/ ES/ GAFTA	
Crude Fiber	2 days	AOAC/ ES/ GAFTA	
Diameter	2 days	By Micrometer	
Fat Content	3 days	ISO 6492	
Moisture	2 days	AOAC/ ES	
Oil Content	3 days	AOAC	
Total Sugars as Invert	2 days	AOAC	
Protein	2days	AOAC/ES	



<b>Sucrose</b>	2days	AOAC/GAFTA	
<b>Urease</b>	2 days	GAFTA	
<b>MILK &amp; DAIRY PRODUCTS</b>			
<b>Acidity of Milk</b>	2 days	AOAC/ NIRO	
<b>Acidity (Dairy Products)</b>	2 days	ES	
<b>Acidity of Cheese</b>	2 days	AOAC	
<b>Ash in Milk</b>	2 days	AOAC	
<b>Ash (Dairy Products)</b>	2 days	ES	
<b>Ash in Cheese</b>	2 days	AOAC	
<b>Bulk Density in Milk Powder</b>	2 days	NIRO	
<b>Chloride in Cheese</b>	2 days	AOAC	
<b>Fat (Dairy Products)</b>	2 days	AOAC/ES	
<b>Fat in Dried Milk</b>	2 days	AOAC	
<b>Moisture in Milk Powder</b>	2 days	NIRO	
<b>Moisture (Dairy Products)</b>	2 days	ES	
<b>Moisture in Cheese</b>	2 days	AOAC	
<b>Ph Value (Dairy Products)</b>	2 days	ES	
<b>Salt (Dairy Products)</b>	2 days	ES	
<b>Total Solids in Milk, Cream</b>	2 days	AOAC	
<b>Total Solids in Milk</b>	2 days	AOAC/ ES	
<b>Protein</b>	2days	AOAC/ES	



<b>Total Solids not Fat in Milk</b>	2 days	AOAC/ ES	
<b>HERBS &amp; SPICES</b>			
<b>Acid Insoluble Ash</b>	3 days	AOAC	
<b>Ash</b>	2 days	AOAC	
<b>Crude Fiber</b>	2 days	AOAC	
<b>Moisture</b>	2 day	AOAC	
<b>Volatile oils</b>	4 days	AOAC	
<b>Alcohols soluble Extract</b>	3 days	E.S	
<b>FRUITS &amp; VEGETABLES</b>			
<b>Acidity</b>	2 days	AOAC/ ES	
<b>Acidity in canned Vegetables</b>	2 days	AOAC	
<b>Alkalinity of Ash in Fruits</b>	2 days	AOAC	
<b>Ash</b>	2 days	AOAC/ ES	
<b>Protein</b>	2days	AOAC/ES	
<b>Crude Fiber in Fruits</b>	3 days	ES	
<b>Impurities in Vegetables</b>	2 days	ES	
<b>Moisture in Frozen potatoes (French Fries)</b>	3 days	AOAC	
<b>Moisture in Molokhia</b>	2 days	ES	
<b>Net Content of Frozen Fruits</b>	2 days	AOAC	
<b>Net Weight in Vegetables</b>	2 days	ES	
<b>Ph Value</b>	2 days	AOAC	





<b>Salt in Vegetables</b>	2 days	ES	
<b>Sodium Chloride in Vegetables</b>	2 days	AOAC	
<b>Soluble Solids (Brix) in Fruits</b>	2 days	AOAC	
<b>Soluble Solids (Brix) in Tomatoes</b>	2 days	AOAC	
<b>Sucrose in Fruits</b>	2 days	AOAC	
<b>Total Solids in Frozen Spinach</b>	2 days	AOAC	
<b>Total Solids</b>	2 days	ES	
<b>Total Sugar in Fruits</b>	2 days	ES	
<b>MEAT &amp; MEAT PRODUCTS</b>			
<b>Ash</b>	2 days	AOAC/ ES	
<b>Fat</b>	3 days	AOAC/ ES	
<b>Moisture</b>	2 days	AOAC/ ES	
<b>Salt</b>	2 days	AOAC	
<b>Protein</b>	2days	AOAC/ES	
<b>NUTS &amp; NUTS PRODUCTS</b>			
<b>Ash</b>	2 days	AOAC	
<b>Fat</b>	2 days	AOAC	
<b>Fiber</b>	2 days	AOAC	
<b>Sodium Chloride</b>	2 days	AOAC	
<b>Protein</b>	2days		



## DETERGENTS & SOAPS

Active Matter in detergents	2 days	ES	
Fat in soap and detergents	2 days	ES	
Ph Value	2 days	ES	
Total Chlorides in soap	2 days	ES	
Total Free Alkali in soap	2 days	ES	
Total Free Caustic Alkali in soap	2 days	ES	
Total Insoluble Matter in Alcohol	2 days	ES	
Water Insoluble matter in solid detergents	2 days	ES	
Water content in soap	2 days	ES	

## WATER & WASTE WATER

Acidity	2 days	SMWW	
Alkalinity	2 days	SMWW	
Calcium	2 days	SMWW/ ES	
Chemical Oxygen Demand	2 days	SMWW	
Chloride	2 days	SMWW/ ES	
Conductivity	2 days	SMWW/ ES	
Color	2 days	Visual inspection	
Magnesium	2 days	SMWW/ ES	
Ph Value	2 days	SMWW/ ES	



<b>Sulphate</b>	2 days	SMWW/ ES	
<b>Total Dissolved Solids</b>	2 days	SMWW/ ES	
<b>Total Hardness (Ca &amp; Mg)</b>	2 days	SMWW/ ES	
<b>Total Soluble Solids</b>	2 days	SMWW/ ES	
<b>Total Suspended Matter</b>	<b>2 days</b>	<b>ES</b>	

- TAT is the number of working days necessary for sample analysis.
- All tests methods mentioned above are the latest updated versions.
- Test Methods Definitions:
  - **AOCS** : American Oil Chemists Society 2002/2003 5<sup>th</sup> Edition.
  - **AOAC** : American Official Methods of Analysis (AOAC International) 2006 10<sup>th</sup> Edition.
  - **ES** : Egyptian Standards
  - **GAFTA**: The Grain & Feed Trade Association
  - **ICC** : International Association for Cereal Chemistry.
  - **ICUMSA**: International Commission for Uniform Methods of Sugar Analysis.
  - **SMWW** : Standard Methods for the Examination of Water & Waste Water Analysis 2012 22<sup>th</sup> Edition
- For more details regarding test methods, please refer to Customer Service.