

TESTING SCOPE OF NATIONAL QUALITY TESTIG DIVISION 2021-2022

BIOTECHNOLOGY TESTING LABORATORIES UNIT: MICROBIOLOGY LABORATORY

Products Names	Parameters	Standard Operating Procedures (SOP)reference code or Standard Methods
Water	<i>Total Viable Count</i>	NQTLD/ MIC/ SOP-1 In accordance with ISO 6222
	<i>Total coliforms</i>	NQTLD/ MIC/SOP-4 in accordance with ISO 9308-1
	<i>Escherichia coli</i>	NQTLD/ MIC/ SOP-4 In accordance with ISO 9308-1
	<i>Salmonella spp</i>	NQTLD/ MIC/ SOP-9 In accordance with ISO 19250
	<i>Pseudomonas aeruginosa</i>	NQTLD/ MIC/ SOP-13 In accordance with ISO16266
	<i>Intestinal enterococci/ Enterococcus faecalis</i>	NQTLD/ MIC/ SOP-15 In accordance with ISO7899
	<i>Spores of Sulfite reducing anaerobes</i>	<i>In accordance with ISO 6461-2</i>
	<i>Clostridium perfringens</i>	NQTLD/ MIC/ SOP-22 In accordance ISO14189
Food, feed and environmental samples	<i>Total viable counts</i>	NQTLD/ MIC/SOP-2 in accordance with ISO 4833-1
	<i>Total coliforms</i>	NQTLD/ MIC/ SOP-SOP-3 in accordance with ISO 4832
	<i>Escherichia coli</i>	NQTLD/ MIC/ SOP-8 in accordance with ISO 16649-1
	<i>Salmonella spp</i>	NQTLD/ MIC/ SOP-10 In accordance with ISO 6579
	<i>Coagulase-positive staphylococci (Staphylococcus aureus and other species)</i>	NQTLD/ MIC/ SOP-12 In accordance with ISO 6888-1
	<i>Enterobacteriaceae</i>	NQTLD/ MIC/ SOP-14 in accordance with ISO 21528- 2
	<i>Vibrio parahaemolyticus</i>	NQTLD/ MIC/ SOP-17 In accordance with21872-1
Food, feed and environmental samples	<i>Vibrio cholerae</i>	NQTLD/ MIC/ SOP-17 In accordance with21872-1
	<i>Sulfite reducing anaerobes</i>	<i>In accordance with ISO 15213</i>

	<i>Shigellasp</i>	NQTLT/ MIC/ SOP-18In accordance with ISO 21567
	<i>Compylobacterspp</i>	NQTLT/ MIC/ SOP-19 In accordance with ISO 10272-1
	<i>Listeria Monocytogenes (enumeration)</i>	NQTLT/ MIC/ SOP-20Part1 In accordance ISO 11290-1
	<i>Listeria Monocytogenes (detection)</i>	NQTLT/ MIC/ SOP-20part 2 in accordance ISO 11290-2
	<i>Clostridium perfringens</i>	NQTLT/ MIC/ SOP-21 in accordance ISO7939
	<i>Clostridium perfringens</i>	NQTLT/ MIC/ SOP-22In accordance ISO14189
	<i>Bacillus cereus</i>	NQTLT/MIC/SOP-23 in accordance with ISO 7932
	<i>Mesophilic lactic acid bacteria</i>	NQTLT/MIC/SOP-24 in accordance with ISO15214
Food, feed and environmental samples with Greater water activity than 0.95	<i>Yeasts &Moulds</i>	NQTLT/ MIC/ SOP-5 in accordance with ISO 21527-1
Food, feed and environmental samples with water activity Less than0.95	<i>Yeasts &Moulds</i>	NQTLT/ MIC/ SOP-6In accordance with ISO 21527-2
Milk and milk Products	<i>Yeasts &Moulds</i>	NQTLT/ MIC/ SOP-7In accordance with ISO 661
Cosmetic	<i>Pseudomonas aeruginosa</i>	NQTLT/ MIC/ SOP-16 In accordance with ISO22717
	Aerobic mesophilic bacteria	NQTLT/MIC/SOP-28 in accordance with ISO 21149
	<i>Staphylococcus aureus</i>	NQTLT/MIC/SOP-27 in accordance with ISO 22718

CHEMICAL TESTING LABORATORIES UNIT : FOOD AGRICULTURE AND MYCOTOXIN

Tea and tea products	Moisture content	NQTLT/FAL/SOP-7
	Dry matter	NQTLT/FAL/SOP-7
	Total ash content	NQTLT/FAL/SOP-8
	Acid insoluble ash	NQTLT/FAL/SOP-10
	Water soluble ash	NQTLT/FAL/SOP-12
	Alkalinity of water soluble ash	NQTLT/FAL/SOP-13
	Water extract	NQTLT/FAL/SOP-11
	Crude fiber	NQTLT/FAL/SOP-9
	caffeine	ISO 10727
Coffee and coffee products	Moisture content	NQTLT/FAL/SOP-14
	Total ash	NQTLT/FAL/SOP-15
	Acid insoluble ash	NQTLT/FAL/SOP-16
	Alkalinity of water soluble ash	NQTLT/FAL/SOP-18
	Petroleum ether extract	NQTLT/FAL/SOP-19
	Water soluble matter	NQTLT/FAL/SOP-17

	Caffeine	ISO 20481
	Ochratoxin A	NQTL D/FAL/SOP-33
Bread	Moisture content	RS EAS 43
	pH of aqueous extract	RS EAS 43
	Acid insoluble ash	RS EAS 43
	Crude fiber	NQTL D/FAL/SOP-9
	Fat content	NQTL D/FAL/SOP-6
	Aflatoxin (B ₁ ,B ₂ G ₁ &G ₂)	NQTL D/FAL/SOP-1
Rice	Head rice	ISO 7301
	Broken rice	ISO 7301
	Damaged rice	ISO 7301
	Chalky	ISO 7301
	Red or redstreaked	ISO 7301
	Organic matters	ISO 7301
	Inorganic matters	ISO 7301
	Paddy grain	ISO 7301
	Moisture content	NQTL D/FAL/SOP-2
	Live weevils	ISO 7301
	Filth	ISO 7301
	Aflatoxin (B ₁ ,B ₂ G ₁ &G ₂)	NQTL D/FAL/SOP-1
Milk powder	Fat content	GEA Niro A9a
	Protein content	NQTL D/FAL/SOP-5
	Total solid	GEA Niro A 1 b
	Total ash	GEA Niro A 25 a
	Moisture content	GEA Niro A1b
	Insolubility index	GEA Niro A3a
	Titrateable acidity	GEA Niro A19a
	Aflatoxin M1	NQTL D/FAL/SOP-31
Fresh milk	Fat content	NQTL D/FAL/SOP-24
	Total solid	NQTL D/FAL/SOP-24
	Freezing point depression	NQTL D/FAL/SOP-24
	Lactose	NQTL D/FAL/SOP-24
	Protein content	NQTL D/FAL/SOP-24
	pH	RS 38
	Solid non fat	NQTL D/FAL/SOP-24
	Density	NQTL D/FAL/SOP-24
	Acidity	NQTL D/FAL/SOP-24
	pH variation	ISO 26323
	Foreign matters	AOAC 952.21
	Aflatoxin M1	NQTL D/FAL/SOP-31
	Titrateable acidity	AOAC 970.5
Cheese	Dry matter	NQTL D/FAL/SOP-22
	Moisture content	NQTL D/FAL/SOP-22
	Fat content	NQTL D/FAL/SOP-23
	protein	FT 120-AN 96a
	TS	FT 120-AN 96a
Yoghurt	Protein	NQTL D/FAL/SOP-25
	TS	NQTL D/FAL/SOP-25

	SNF	NQTLT/FAL/SOP-25
	Glucose	NQTLT/FAL/SOP-25
	Fructose	NQTLT/FAL/SOP-25
	Sucrose	NQTLT/FAL/SOP-25
	Lactose	NQTLT/FAL/SOP-25
	Carbohydrates	NQTLT/FAL/SOP-25
	fat	NQTLT/FAL/SOP-25
	Lactic acid	NQTLT/FAL/SOP-25
	Aflatoxin M1	NQTLT/FAL/SOP-31
Cream	Fat content	FT 120-AN 98b
	Protein	FT 120-AN 98b
	TS	FT 120-AN 98b
	SNF	FT 120-AN 98b
whey	Fat	FT 120-AN 110a
	Total solid	FT 120-AN 110a
	Protein	FT 120-AN 110a
Improved milk	Density	NQTLT/FAL/SOP-24
	Protein content	NQTLT/FAL/SOP-24
	Fat content	NQTLT/FAL/SOP-24
	TS	NQTLT/FAL/SOP-24
	SNF	NQTLT/FAL/SOP-24
	Lactose	NQTLT/FAL/SOP-24
	FPD	NQTLT/FAL/SOP-24
	Acidity	NQTLT/FAL/SOP-24
	Citric content	NQTLT/FAL/SOP-24
	FFA	NQTLT/FAL/SOP-24
	Aflatoxin M1	NQTLT/FAL/SOP-31
Juice	Glucose	NQTLT/FAL/SOP-27
	fructose	NQTLT/FAL/SOP-27
	sucrose	NQTLT/FAL/SOP-27
	Citric acid	NQTLT/FAL/SOP-27
	Malic acid	NQTLT/FAL/SOP-27
	Total carbohydrates	NQTLT/FAL/SOP-27
	TS	NQTLT/FAL/SOP-27
	Soluble solids	RS 77
	pH	RS 77
Concentrated milk	Fat	FT 120-AN 113a
	TS	FT 120-AN 113a
	SNF	FT 120-AN 113a
	Aflatoxin M1	NQTLT/FAL/SOP-31
Fermented milk	Fat	NQTLT/FAL/SOP-25
	protein	NQTLT/FAL/SOP-25
	TS	NQTLT/FAL/SOP-25
	Aflatoxin M1	NQTLT/FAL/SOP-31
Infant formula	Fat	FT 120-AN 112a
	TS	FT 120-AN 112a
	SNF	FT 120-AN 112a
	Aflatoxin M1	NQTLT/FAL/SOP-31

	Vitamin A	HPLC METHOD	
Honey	Glucose	NQTLT/FAL/SOP-26	
	Sucrose	NQTLT/FAL/SOP-26	
	Fructose	NQTLT/FAL/SOP-26	
	Citric acid	NQTLT/FAL/SOP-26	
	Malic acid	NQTLT/FAL/SOP-26	
	Total carbohydrates	NQTLT/FAL/SOP-26	
	TS	NQTLT/FAL/SOP-26	
Maize grains	Moisture content	NQTLT/FAL/SOP-2	
	Foreign matter	ISO 605	
	Inorganic matter	ISO 605	
	Broken grains	ISO 605	
	Rotten and diseased grains	ISO 605	
	Total defective grains	ISO 605	
	Live weevils	ISO 605	
	filth	ISO 605	
	Aflatoxin (B ₁ ,B ₂ G ₁ &G ₂)	NQTLT/FAL/SOP-1	
Dry beans	Moisture content	NQTLT/FAL/SOP-38	
Cassava flour and ground cassava	Moisture content	NQTLT/FAL/SOP-38	
	Crude ash	NQTLT/FAL/SOP-8	
	Acid insoluble ash	NQTLT/FAL/SOP-4	
	Crude fibers	NQTLT/FAL/SOP-42	
	Starch	AOAC 996.11	
	Aflatoxin (B ₁ ,B ₂ G ₁ &G ₂)	NQTLT/FAL/SOP-1	
	Hydrogen cyanide(HCN)	NQTLT/ICH/SOP-30	
Processed cereals(flour)	Moisture content	NQTLT/FAL/SOP-38	
	Total ash	NQTLT/FAL/SOP-8	
	Acid insoluble ash	NQTLT/FAL/SOP-4	
	Fiber content	NQTLT/FAL/SOP-42	
	Fat content	NQTLT/FAL/SOP-41	
	protein	NQTLT/FAL/SOP-40	
	Granularity	RS 268:2007	
	Starch	AOAC 996.11	
	Total carbohydrates	AOAC 986.25	
	Vitamin A	AOAC 2002.06	
	Aflatoxin (B ₁ ,B ₂ G ₁ &G ₂)	NQTLT/FAL/SOP-1	
	Animal feeds	Moisture content	NQTLT/FAL/SOP-38
		Crude ash	NQTLT/FAL/SOP-36
Acid insoluble ash		NQTLT/FAL/SOP-4	
Crude fiber		NQTLT/FAL/SOP-42	
Crude fat		ISO 12099	
Crude protein		ISO 12099	
Total carbohydrates		ISO 12099	
Aflatoxin (B ₁ ,B ₂ G ₁ &G ₂)		NQTLT/FAL/SOP-1	
Biscuits	Moisture content	NQTLT/FAL/SOP-20	
	Acid insoluble ash	NQTLT/FAL/SOP-21	
Macadamia kernels	Moisture content	NQTLT/FAL/SOP-38	

	Total ash	NQTLD/FAL/SOP-38
	Oil content	ISO 659
	Shrunken and shriveled kernels	RS 170
	Mouldy kernels	RS 170
	Rotten and insects damaged	RS 170
	Live insects	ISO 605
	Foreign matters	ISO 605
	Aflatoxins B1,B2,G1 and G2	NQTLD/FAL/SOP-1
Groundnuts	Moisture content	NQTLD/FAL/SOP-38
	Damaged kernels	ISO 605
	Other defects	ISO 605
	Unshelled kernels	EAS 46
	Total defectives kernels	EAS 46
	Foreign matter	EAS 46
	Oil content	ISO 659
	Aflatoxins B1,B2,G1 and G2	NQTLD/FAL/SOP-1
Tofu	Moisture content	NQTLD/FAL/SOP-38
	Crude fat	ISO 659
	Crude protein	NQTLD/FAL/SOP-5
Urea	Moisture	NQTLD/FAL/SOP-28
	Nitrogen	NQTLD/FAL/SOP-40
	Ash	AOAC 955.03
	pH	RS 71
NPK	Moisture	NQTLD/FAL/SOP-28
	Nitrogen	NQTLD/FAL/SOP-40
	Phosphorus	KS 157:1998
	Potassium	NQTLD/ICH/SOP-16
	pH	RS 71
Fresh fish and beef	Formaldehyde	NQTLD/FAL/SOP-50
Calcium ammonium nitrate	Moisture	NQTLD/FAL/SOP-28
	Nitrogen	NQTLD/FAL/SOP-40
Potassium chloride(MOP)	Moisture	NQTLD/FAL/SOP-28
	Potassium	NQTLD/ICH/SOP-16
	pH	RS 71
DAP/MAP	Moisture	NQTLD/FAL/SOP-28
	Nitrogen	NQTLD/FAL/SOP-40
	phosphorus	AOAC 969.02
	pH	RS 71
Compost/organic manure	Moisture	NQTLD/FAL/SOP-28
	Nitrogen	NQTLD/FAL/SOP-40
	Phosphorus	AOAC 969.02
	Potassium	NQTLD/ICH/SOP-16
	Organic matters	RS 73:2013
	C/N ratio	RS 73:2013
	PH	RS 71:2007
Pyrethrins extract	pyrethrins	NQTLD/FAL/SOP-34
Food supplements/ Food stuffs	Vitamins(water and fat soluble)	AOAC Methods
CHEMICAL TESTING LABORATORIES UNIT : ORGANIC CHEMISTRY		

Alcoholic beverages & carbonated soft drinks	Ethyl alcohol content	NQTLD/OCH/SOP-20
	Total acids	
	Volatile acids	
	Total Sulfur dioxide(T-SO ₂)	
	pH	
	Glucose fructose	
	Malic acid	
	Citric acid	
	Tartaric acid	
	Carbon dioxide(CO ₂)	
	Density	
	Folin C index	
	Fructose	
	Free sulfur dioxide(F-SO ₂)	
	Glycerol	
	Reducing sugar	
	pH for cloud beer	
	Sorbic acid	
	Total dissolved solids	AOAC 932-12-1980
	Aldehydes and acetaldehydes	NQTLD/OCH/SOP-32
	Esters as ethyl acetate	
	Methanol	
	1-Propanol	
	2-Propanol or Isopropanol	
	1-Butanol	
	2-Butanol	
	1-Pentanol or n-Pentanol or amyl alcohol	
	Iso-amyl alcohol	
	Total solids	NQTLD/OCH/SOP-6
Skincare creams, lotions ,gel	Thermal stability	NQTLD/OCH/SOP-16
	PH range	RS EAS 786:2013
	Total fatty substances content	NQTLD/OCH/SOP-15
	hydroquinone	NQTLD/OCH/SOP-13
Pomades and solid brilliantine	Sulphate ash	NQTLD/OCH/SOP-18
Hair cream	Thermal stability	NQTLD/OCH/SOP-16
	PH range	NQTLD/OCH/SOP-34
Diesel or gasoil	Cetane number	ASTM D 7806
	Cetane index	
	density	
	Polycyclic aromatic hydrocarbons	
	Flash points	
	Kinematic viscosity	
	Distillation	
	Fatty acids methyl esters	
	Cetane improver	
	Aromatics	

	Distillation	ASTM D86
Engine oil	Viscosity index	ASTM D445-09
	Kinematic viscosity	ASTM D1298
	Specific gravity/relative density	
	API Gravity	
Gasoline	Oxygenates	ASTM D 5845
	Distillation	ASTM D86
	Colour	Visual inspection
	Appearance	
	Toluene	ASTM D 5845
	M-xylene	
	O-xylene	
	P-xylene	
	Ethyl Benzene	
	3- Ethyl toluene	
	4- ethyl toluene	
	Mesitylene	
	pseudocumene	
	hemellitol	
	naphtalene	
	Oxygen	
	olefins	
	aromatics	
	Saturates	
	Anti-k knocking index	
	Dry vapor pressure equivalent(DVPE)	
	Methyl cyclopentadienyl manganese tricarbonyl (MMT)	
	Density	ASTM D4052
Jet A1	Appearance	Visual inspection
	Aromatics	ASTM D 5845
	Distillation	ASTM D86
	Density	ASTM D4052
	Freezing point	ASTM D 5845
	Polycyclic aromatic hydrocarbons	
	Fatty acid methyl esters(FAMEs)	
	Smoke point	
	Flash points	ASTM D93
	Distillation temperature	ASTM D86
	Kinematic viscosity	ASTM D445-09
	Freezing point	ASTM D 5845
Kerosene	Appearance	Visual inspection
	Aromatics	ASTM D 5845
	Density	ASTM D4052
	Polycyclic aromatic hydrocarbons	ASTM D 5845
	Fatty acids methyl esters(FAMEs)	
	Smoke point	
Sanitary towels	Absorbance capacity	NQTLD/OCH/SOP-21

	pH value	NQTLD/OCH/SOP-23
	Moisture content of filler material	NQTLD/OCH/SOP-22
Toilet paper	Water absorption	NQTLD/OCH/SOP-36
	pH value, hot extract	NQTLD/OCH/SOP-35
	Moisture content	NQTLD/OCH/SOP-37
Scouring powder	pH of 1% solution	RS EAS 294: 2002
	Volatile matter	
	Free alkali content	
	Alkali salt content	
	Matter insoluble in water	
Skin powder	Matter insoluble in boiling water	NQTLD/OCH/SOP-29
	Moisture and volatile matter	NQTLD/OCH/SOP-31
	PH of aqueous suspension	NQTLD/OCH/SOP-30
Laundry bar soap	Total fatty matter	NQTLD/OCH/SOP-12
	Matter insoluble in water	NQTLD/OCH/SOP-10
	Matter insoluble in ethanol	NQTLD/OCH/SOP-11
	Moisture and volatile matter content	NQTLD/OCH/SOP-38
	Total free alkali as NaOH	NQTLD/OCH/SOP-08
	Total caustic alkali as NaOH	NQTLD/OCH/SOP-09
Liquid detergent	Solubility in water	NQTLD/OCH/SOP-33
	Rinsing properties	RS EAS 383:2013
	pH at 27 degree Celsius at 1% solution	NQTLD/OCH/SOP-24
	Matter insoluble in water	NQTLD/OCH/SOP-10
	pH value range	NQTLD/OCH/SOP-24
Toilet soap	Total fatty matter	NQTLD/OCH/SOP-12
	Matter insoluble in ethanol	NQTLD/OCH/SOP-11
	Free caustic alkali as NaOH	NQTLD/OCH/SOP-09
Liquid soap	Matter insoluble in ethanol	NQTLD/OCH/SOP-11
	Free caustic alkali as K ₂ O	NQTLD/OCH/SOP-09
	pH	NQTLD/OCH/SOP-19
Essential oils and herbal medicines	Chromatographic profile	ISO 7609:1985
Vegetables and water	Pesticides	AOAC 970.52
Perfumes	Stability of smell	RS 408:2019B
	Cloud temperature	RS 408:2019C
	Ethyl alcohol content	NQTLD/OCH/SOP-20
	pH(neat)/pH	RS 408:2019D

CHEMICAL TESTING LABORATORIES UNIT: INORGANIC CHEMISTRY

Physical and chemical parameters in water	pH	NQTLD/ICH/SOP-15
	Total dissolved solids TDS	EPA 160.1
	Total hardness	NQTLD/ICH/SOP-22
	Turbidity	NQTLD/ICH/SOP-29
	Alkalinity	EPA Methods 310.1
	Electrical conductivity	NQTLD/ICH/SOP-28
	Sulphate as SO ₄ ²⁻	NQTLD/ICH/SOP-14
	Free chlorine	ISO 7393:2012
	Chloride Cl ⁻	NQTLD/ICH/SOP-8

Water (analysis of heavy metals by AAS)	Sodium as Na	NQTLD/ICH/SOP-13
	Potassium as K	
	Magnesium as Mg	
	Manganese as Mn	
	Zinc as Zn	NQTLD/ICH/SOP-34
	Iron as Fe	
	Cadmium as Cd	
	Chromium as Cr	
	Copper as Cu	NQTLD/ICH/SOP-35
	Nickel as Ni	
	Cobalt as Co	
Analysis of heavy metals by ICP/MS	Lead as Pb	ISO 172924:2016
	Arsenic as As	
	Mercury as Hg	
	Cadmium as Cd	
	Tin as Sn	
	Thallium as Tl	
	Molybdenum as Mo	
	Aluminium as Al	
	Niobium as Nb	
	Cesium as Cs	
	Francium as Fr	
	Strontium as Sr	
	Barium as Ba	
	Radium as Ra	
	Scandium as Sc	
	Yttrium as Y	
	Aluminium as Al	
	Rubidium as Rb	
	Titanium as Ti	
	Vanadium as V	
	Chromium as Cr	
	Gallium as Ga	
	Germanium as Ge	
	Arsenic as As	
	Zirconium as Zr	
	Thallium as Tl	
	Mercury as Hg	
	Niobium as Nb	
	Molybdenum as Mo	
	Ruthenium as Ru	
	Rhodium as Rh	
	Palladium as Pd	
	Gold as Au	
	Cadmium as Cd	
	Tin as Sn	

	Antimony as Sb	
	Indium as In	
	Platinum as Pt	
	Hafnium as Hf	
	Thorium as Th	
	Bismuth as Bi	
	Tellurium as Te	
	Silicon as Si	
	Selenium as Se	
Digestible samples(Food ,beverage, cosmetics and environmental related matrices) analysis of heavy metals by ICP/MS	Sodium as Na	NQTLD/ICH/SOP-12
	Potassium as K	
	Magnesium as Mg	
	Manganese as Mn	
	Zinc as Zn	
	Iron as Fe	
	Copper as Cu	
	Lead as Pb	
	Arsenic as As	
	Mercury as Hg	
	Cadmium as Cd	
	Tin as Sn	
	Thallium as Tl	
	Molybdenum as Mo	
	Aluminium as Al	
	Niobium as Nb	
	Cesium as Cs	
	Francium as Fr	
	Strontium as Sr	
	Radium as Ra	
	Scandium as Sc	
	Yttrium as Y	
	Aluminium as Al	
	Rubidium as Rb	
	Titanium as Ti	
	Vanadium as V	
	Chromium as Cr	
	Gallium as Ga	
	Germanium as Ge	
	Arsenic as As	
	Zirconium as Zr	
	Thallium as Tl	
	Mercury as Hg	
	Niobium as Nb	
	Molybdenum as Mo	

Tomato paste	pH	ISO 1842-1991
Juices (soft beverages)	pH	AOAC 940.19
	Acidity	ISO 750
	Brix	AOAC 940.27
Honey	Moisture content	NQTL/ICH/SOP-36
	Total ash	NQTL/ICH/SOP-23
	Acidity	NQTL/ICH/SOP-20
	pH	AOAC 945:27
	Fiehe's test	NQTL/ICH/SOP-38
	Conductivity	RS 164
	Relative density	NQTL/ICH/SOP-11
Sugar	Polarization	NQTL/ICH/SOP-21
	Moisture content	NQTL/ICH/SOP-25
	Sulfur dioxide	KS 05-58:1998
	Conductivity ash	NQTL/ICH/SOP-26
	Color	KS 05-58:1998
salts	sulfates	KS 05-2029:1989
	Total chloride as NaCl	NQTL/ICH/SOP-37
	Iodine	NQTL/ICH/SOP-17
	Moisture content	KS 05-2029:1989
	Water insoluble matter	ISO-2479-1972
Cooking oil	Refractive index	NQTL/ICH/SOP-18
	Moisture and volatile matter	NQTL/ICH/SOP-25
	Peroxide value	NQTL/ICH/SOP-5
	Saponification value	NQTL/ICH/SOP-6
	Acid value	NQTL/ICH/SOP-7
	Relative density	KS 05-2029:1989
	Iodine value	NQTL/ICH/SOP-19
	Soap content	NQTL/ICH/SOP-3
	Free fatty acid	NQTL/ICH/SOP-31
MATERIAL TESTING LABORATORIES UNIT : BUILDING MATERIALS LABORATORY		
CEMENT	Initial setting time	RS EAS 148-1
	Final setting time of cement	RS EAS 148-1
	Compressive strength of cement (including strength for 2days or 7days and 28 days strength)	RS EAS 148-1
	Lost on ignition	RS EAS 148-2:2004
	Cement soundness	RS EAS 148-1:2004
ROOFING SHEETS	Zinc coating mass and Base Metal thickness of roofing sheets	RS EAS 11
	Tensile strength of roofing sheets (3 pieces)	RS EAS 11
	Marking of roofing of sheets	RS EAS 11 RS EAS 468 EAS 410
	Dimensional test of roofing sheets	RS EAS 11 RS EAS 468

		RS EAS 410
CEMENT BLOCKS /BRICKS	Water absorption of bricks and Blocks	RS 568
	Compressive strength of Bricks and blocks (price for 10 specimens/batch)	RS 568
	Dimensional test of bricks/ blocks	RS 568
PAVING BLOCKS	Water absorption of Blocks (price for 10 specimens/batch)	RS 415
	Compressive strength of blocks (price for 10 specimens/batch)	RS 415
	Dimensional test of paving blocks	RS 415
BURNT BRICKS	Water absorption of burnt bricks (price for 10 specimens/batch)	RS 359
	Compressive strength of burnt bricks (price for 10 specimens/batch)	RS 359
	Dimensional test of burnt bricks	RS 359
CRAY ROOFING TILES	Flexural strength of roofing Tiles (price for 10 specimens/batch)	RS 358
	Water absorption test of roofing tiles (price for 10 specimens/batch)	RS 358
	Dimensional test roofing tiles	RS 358
CONCRETE	Compressive strength of hardened concrete cubes or cylinders (price for 3 specimens)	RS ISO1920-4
SAND	Particle size distribution by sieve analysis	RS 211-1
Plastic pipes	Resistance to internal hydrostatic pressure (1hour): Applicable to each of the diameters (mm): 25, 32, 40, 50, 63, 75, 90, 110, 160 and 180	ISO 1167-1
Plastic pipes	Resistance to internal hydrostatic pressure (100hours): Applicable to each of the diameters (mm): 25, 32, 40, 50, 63, 75, 90, 110, 160 and 180	ISO 1167-1
Plastic pipes	Marking/Labeling inspection	Product standard
Plastic pipes	Heavy Metals/halogen content	Product standard
Plastic pipes	Dimensions	Product standard
Building Materials	Resistance to Abrasion	ISO 7784-1,2
Plastics and composite	Tensile test:	ISO 527-1, ISO 37
Plastics and composite	Impurity: heavy metals content	:NQTLD/MTLU/NDT/SOP-1
MATERIAL TESTING LABORATORIES UNIT :		
DESTRUCTIVE MECHANICAL TESTS LABORATORY		
Steel bars for reinforcing of concrete	Tensile strength/Yield strength/elongation	
	bar diameter 6mm	RS ISO 6892-1
	bar diameter 8mm	RS ISO 6892-1
	bar diameter 10mm	RS ISO 6892-1

	bar diameter 12mm	RS ISO 6892-1
	bar diameter 14mm	RS ISO 6892-1
	bar diameter 16mm	RS ISO 6892-1
	bar diameter 20mm	RS ISO 6892-1
	bar diameter 25mm	RS ISO 6892-1
	bar diameter 32mm	RS ISO 6892-1
	Dimensional test of steel bars	RS ISO 6935-1&2
	Three points Bend test of steel bars for reinforcing of concrete	
	bar diameter 6mm,8mm,10mm,12mm	RS ISO 15630-1
	bar diameter 14mm and 16mm	RS ISO 15630-1
	bar diameter 20mm and 25mm	RS ISO 15630-1
	bar diameter 32mm and above	RS ISO 15630-1
	Three points Bend test of other metallic materials	RS ISO: 7438
	Dimensional test of Metallic materials	PRODUCT RELATED
Structural steels- Hollow sections	Tensile strength(Min 3 pieces)	RS ISO 6892-1
	Dimensional test	ISO 4019
Steel plates and sheets	Tensile properties (3 pieces)	PRODUCT RELATED
	Dimensional test	PRODUCT RELATED
polyethylene water tanks	Resistance to deformation	RS 128
	Tensile properties (6 pieces)	RS 128
	Dimensional test	RS 128
MATERIAL TESTING LABORATORIES UNIT :		
NON DESTRUCTIVE MECHANICAL TESTS LABORATORY		
Metals	Brinell Hardness of metals	RS ISO 6506-1
	Chemical composition (XRF test for up to 44 elements:Na,Mg,Al,Si,P,S,Cl,K,Ca,Sc ,Ti,V, Cr,Mn,Fe,Co,Ni,Cu,Zn,As,Se,Rb,Sr,Zr,,Nb,Mo, Ru,Pd,Ag,Cd,Sn,Sb,Te,Cs,Ba,Hf,Ta, W,Au,Hg,Pb,Bi Th and U)	NQTL/MTL/NDT/SOP-1
All solid materials and fuels	Carbon and sulfur test	ISO &ASTM standards
SOILS AND ROCKS	Chemical composition (XRF test for up to 44 elements:Na,Mg,Al,Si,P,S,Cl,K,Ca,Sc ,Ti,V, Cr,Mn,Fe,Co,Ni,Cu,Zn,As,Se,Rb,Sr,Zr,,Nb,Mo, Ru,Pd,Ag,Cd,Sn,Sb,Te,Cs,Ba,Hf,Ta, W,Au,Hg,Pb,Bi Th and U)	NQTL/MTL/NDT/SOP-1

ELECTRICAL CABLES	Marking	RS IEC 60227-1
	Chemical composition of cable conductor material	NQTL/MTL/NDT/SOP-1
	Resistance of electrical cables rolls (100m min)	RS IEC 60227-2
School chalk	Chemical composition	NQTL/MTL/NDT/SOP-1
	Moisture content of powder materials	EAS 25
	Product Dimensional test	EAS 25
	Product Marking inspection	EAS 25
Wax matches	Burning quality	RS EAS 125
	Inspection of sticks	RS EAS 125
MATERIAL TESTING LABORATORIES UNIT : POLYMERS AND TEXTILE LABORATORY		
CONDOMS	Freedom from holes of condoms	RS ISO 4074
	Condom strength Bursting volume and Bursting pressure of condoms	RS ISO 4074
	Pack seal integrity of condoms	RS ISO 4074
	Condoms dimensions (width and length)	RS ISO 4074
	Thickness of condoms and Quantity of lubricant in condom container	RS ISO 4074
	Design and inspection of labeling requirements	RS ISO 4074
MATRESS	Tensile properties	EAS 378-1
	Tear resistance	EAS 378-1
	Density	EAS 378-1
	Dimensions	EAS 378-1
	Marking	EAS 378-1
LEATHER MATERIALS	Tensile strength of leather materials and Percentage extension of leather materials	ISO 3376
	Resistance to tearing load of leather materials	ISO 3377-1&2
	Thickness of leather materials	RS ISO 2589
	Flex resistance of leather materials	ISO 5402
	Apparent density	ISO 2420
TOILET PAPER	Tensile strength	RS EAS 355
	Tissue paper substance/grammage	RS EAS 355
	Dimensional test	RS EAS 355
	Design and inspection of labeling requirements	RS EAS 355
	Moisture content	ISO 287
base paper for waxed bread wrap	Bursting strength	ISO 2758
	Tearing strength	ISO 1924
	Substance/grammage	ISO 536
paper serviettes (napkins)	Tensile strength	ISO 12625-4
	Moisture content	ISO 287

	Dimensional test	ISO 22198
	Grammage	ISO 536
	Design and inspection of labeling requirements	RS EAS 861
Facial tissue paper	Grammage	ISO 12625-6
	Dimensional test	ISO 22198
	Design and inspection of labeling requirements	RS EAS 862
	Tensile strength	ISO 12625-4
Office papers	Grammage	ISO 536
	Moisture content	ISO 287
	Elmendorf Tear index	ISO 1974
	Water absorptiveness	ISO 535
Photocopy paper	Grammage	ISO 536
	Moisture content	ISO 287
	Thickness	ISO 534
	Elmendorf Tear index	ISO 1974
Cement bags paper	Grammage	ISO 536
	Moisture content	ISO 287
	Tensile strength	ISO 1924-2
	Porosity	ISO 5636
	Elmendorf Tear resistance	ISO 1974
	Water absorptiveness	ISO 535
Waxed paper for bread wrap	Heavy metal content	NQTL/MTL/NDT/SOP-1
	Grammage	ISO 536
	Bursting strength	ISO 2758
Sack Kraft paper	Grammage	ISO 536
	Moisture content	ISO 287
	Tensile strength	ISO 1924-3
	Water absorptiveness	ISO 535
	Tear index	ISO 1924-3
	Tensile index	ISO 1924-3
	Bursting strength	ISO 2758
Paper bags	Grammage	ISO 536
	Bursting strength	ISO 2758
	Elmendorf Tearing resistance	ISO 1974
	Water absorptiveness	ISO 535
Wrapping paper	Grammage	ISO 536
	Bursting strength	ISO 2758
	Tearing resistance	ISO 1974
TEXTILE	Tensile strength	ISO 13934-1
	Tear strength	ISO 9073-4
	Specific weight(mass per unit area)	ISO 3801
	Dimensional test	ISO 22198
	Resistance to abrasion	ISO7784-1&2
	Resistance to water penetration	ISO 811
	Color Fastness to weathering	ISO105-C06

	Color Fastness to washing	ISO 105-C06
	Color Fastness to Rubbing	ISO 105-X12
	Color measurement	Equipment method
	Color Fastness to light	Equipment method
	Fiber composition	ISO 1833
Paints and Coatings	Resistance to Abrasion	ISO7784-1&2
	Gloss value	ISO 2813
	Loss of Gloss to weathering	ISO 2813
	Density or Specific Gravity	ISO 2811-4
	Drying Time of paint	ISO 9117-3
	Hardness test	
	PH	RS EAS 851 2016
	Fineness of paint granules	ISO1524
	Non Volatile matter	ISO 3251
Cement	Loss on Ignition	EAS 148-2
	Chloride content Sulphate content	EAS 148-2
Plastics	Biodegradability	ISO 14855-2
	Resistance to Abrasion	ISO 7784-1,2
	Melt Flow rate	ISO 1133-1
Notebook books	Tear factor	ISO 1924-2
	Dimension Test	ISO 22198
	Grammage/substance	ISO 536
	Water Absorptiveness	ISO 535
	Design and Inspection of Labeling or Packaging Requirements	RS ISO 4074
Water Resistant(Tarpulins, Tents, water bladders,etc)	Resistance to water penetration	ISO 811
	Tensile Strength	ISO 13934-1
	Tear Strength	ISO 9073-4
	Specific weight(Mass per unit area)	ISO 3801
Cook stoves	Cooksoves Thermal efficiency and Emission (CO, CO2 and PM2.5)	ISO 19867-1
	Cooksoves Safety and durability	ISO 19867-1
	Cooksoves Dimensions	RS 290
	Cooksoves Marking inspection	RS 290
Biomass Solid fuels	Solid and liquid Fuel calorific value	ISO 1716, DIN 51900, ISO 1928, ASTM D240, ASTM D4809, ASTM D5865,ASTM D1989, ASTM D5468, ASTM E711
	Solid Fuel moisture content	ASTM D2974-method A and ISO 18134-1
	Solid Fuel ash content	ASTM D2974-method D