



# Caleb Brett

Peabody Analytical Laboratory  
227 Washington Street  
Peabody, MA 01960

Tel: 978-531-6785; Fax: 978-531-6792; e-mail: [sumanta.sanyal@intertek.com](mailto:sumanta.sanyal@intertek.com)

## Food, Cosmetics, Textile, Toys & Plastic Testing for Physical, Chemical and Microbiological Parameters ;

Product Type	Physical & Chemical Tests	Method Ref.
General Food	Acidity/Alkalinity	AOAC
	Ash Content	AOAC
	Density/Sp.Gravity	AOAC
	Fat / Oil Content	AOAC
	Filth Examination (AOAC)	AOAC
	Aluminum, Iron, Manganese	AOAC
	Calcium	AOAC
	Magnesium	AOAC
	Potassium	AOAC
	Sodium	AOAC
	Moisture Content	AOAC
	pH	AOAC
	Phosphate Content	AOAC
	Salt (NaCl) Content	AOAC
	Total Nitrogen Content	AOAC
	Viscosity	AOAC
	Canned Food	Brix
Head Space		AOAC
Drained Weight		AOAC
Net Weight		AOAC
pH		AOAC
Total Solid		AOAC
Can Stability Test		AOAC
Water	Acidity/Alkalinity	SM
	Bicarbonate Content	SM
	Carbonate Content	SM
	Chloride Content	SM
	Colour	SM
	Conductivity	SM

	Cyanide Content	SM
	Fluoride Content	SM
	<u>Metal Content:</u> Sb,As,Ba,Cd,Cr,Cu,Pb,Hg,Mo,Ni,,Se,Zn	SM
	<u>Minerals:</u> Al,Ca,Fe,Mg,Mn,K,Na	SM
	Nitrate Nitrogen Content	SM
	pH	SM
	Phosphate Content	SM
	Residual Chlorine Content	SM
	Silica Content	SM
	Sulphate Content	SM
	Total Dissolved Solid (TDS)	SM
	Total Hardness Content	SM
	Total Suspended Solid (TSS)	SM
	Turbidity	SM
Drinking Water	E.coli count	SM
WHO Parameters	Coliform count	SM
	As,Ba,Cd,Cr,Cu,Pb, Mn,Mo,Ni,Se	SM
	Cyanide	SM
	Nitrate	SM
	<b>Microbiological Test</b>	
General Food	Anaerobic Bacteria Count	
	Bacillus cereus Count	
	Clostridium Perfringens	
	Coliform Count	
	Escherichia Coli Count	
	Enterobacteriaceae	
	Fecal Streptococcal Count	
	Lactobacillus Count	
	Listeria Monocytogenes	
	Mould Count	
	Mould & Yeast Count	
	Pseudomonas aeruginosa Count	
	Salmonella	
	Staphylococcus aureus Count	
	Total plate Count/Aerobic Plate Count	
	Yeast Count	
Waste Water	Coliform Count	
	Escherichia coli Count	
	Fecal Coliform Count	
	Total Bacteria Count	
Cosmetics/Toys	Antimicrobial Preservative Effectiveness: <ul style="list-style-type: none"> <li>• Staphylococcus aureus</li> <li>• Escherichia Coli</li> </ul>	USP<51>

	<ul style="list-style-type: none"> <li>• Pseudomonas aeruginosa</li> <li>• Candida albicans</li> <li>• Aspergillus niger</li> </ul>	
	Microbial Limit:	USP <61>
	<ul style="list-style-type: none"> <li>• Total Aerobic Microbial Count</li> <li>• Mould &amp; Yeast Count</li> <li>• Staphylococcus aureus</li> <li>• Escherichia Coli</li> <li>• Pseudomonas aeruginosa</li> <li>• Salmonella</li> </ul>	
	Microbial Contamination Test	BP<XVIB>
	<ul style="list-style-type: none"> <li>• Total Aerobic Microbial Count</li> <li>• Mould &amp; Yeast Count</li> <li>• Staphylococcus aureus</li> <li>• Escherichia Coli</li> <li>• Pseudomonas aeruginosa</li> <li>• Salmonella</li> <li>• Clostridia</li> <li>• Enterobacteriaceae 7 other bacteria</li> </ul>	
	Sterility test: <ul style="list-style-type: none"> <li>• Solid Product</li> <li>• Liquid Product</li> </ul>	USP <71>
Textile / Plastic Products	Anti-bacterial Activity Test: <ul style="list-style-type: none"> <li>• Qualitative(Textile)</li> <li>• Quantitative (Textile)</li> <li>• Qualitative (Plastic)</li> <li>• Quantitative (Solid Material)</li> </ul>	AATCC 147 AATCC 100 ASTM G22 ASTM E2149
	Mould Resistance Test: <ul style="list-style-type: none"> <li>• Textile</li> <li>• Plastic</li> <li>• Leather</li> </ul>	AATCC 30-iii ASTM G21 ASTM D4576
	Mould Identification	
	INTERPRETATION	
*	Metal Scan by ICP; As, Se, Sb, by Hyride AAS,and Hg by Hg-Analyzer or the entire scan by ICPMS	
AOAC	Assoc. of Official Analytical Chemists	
SM	Standard Methods-AWWA	
USP	US Pharmacopeia	
BP	British Pharmacopeia	
AATCC	Am.Assoc. of Tex. Color Chemists	
ASTM	Am Std for Testing Materials	
BAM	Bacteriological Analytical Manual	



