

January 2017 – Rev 8

ICA - PUBLICATIONS

Please find below a listing of the current methods of analysis from our office as well as our other publications:

ICA METHODS

1	Determination of Moisture (Oven Method)
2	Determination of iso-oleic acid
3	Sampling (Cocoa Powder, Bars of Chocolate, Cocoa Mass Block of Chocolate and Cocoa Butter)
4	Determination of the Melting Point of Cocoa Butter
5	Determination of the Semi-micro Values
6	Organoleptic Examination (Cocoa Powder)
7	Determination of Milk Protein (according to G.R. Jansen)
8	Colorimetric Determination of the Cocoa Pigments (according to T.A. Rohan and G. Neirinckx)
9	Transfer of Packaging Odours to Cocoa and Chocolate Products (according to L. Robinson, modified by F. Chastellain))
10	Total Sterol Determination
11	Determination of Cocoa Powder Fineness (75 micron sieve)
12	Manufacturing Process for Small Scale Chocolate Samples
13	Determination of Total Nitrogen (Protein) in Cocoa and Chocolate Products
14	Determination of Total Fat in Cocoa Product (HC Hydrolysis Method)
15	Electrometric pH - Determination of Cocoa and Chocolate Products
16	Determination of Ash in Cocoa and Chocolate Products
17	Determination of Milk Protein in Chocolates (AOAC Method) + Addendum



18	UV-Extinction Values for Cocoa Butter
19	UV-Extinction Values for Cocoa Butter after washing with 0,1 n NaOH
20	Gas liquid Chromatographic Analysis of Sterols of Cocoa Butter
21	Preparation of Methyl Esters of Cocoa Butter Fatty Acids
22	Analysis of Methyl Esters of Cocoa Butter Fatty Acids by Gas Liquid Chromatography
23	Determination of the Unsaponifiable Matter in Cocoa Butter
24	Determination of the Alkalinity of Soluble and Insoluble Ash in Cocoa and Chocolate Products
25	Determination of the Water-insoluble, Water-soluble and Acid-insoluble Ash in Cocoa and Chocolate Products
26	Determination of Moisture (Karl Fischer Method)
27	Determination of Wettability of Instant Cocoa Powder in Water
28	Determination of Purines in Cocoa and Cocoa Products
29	Determination of the "Blue Value"
30	Determination of the Content of Ammoniacal Nitrogen in Cocoa Beans and in Unalkalized Cocoa Mass
31	Determination of the Cooling/Solidification Curve of Cocoa Butter and of other Fats used in Chocolate and Confectionery Products
32	Determination of D-Sorbitol in Chocolate and Sugar Confectionery Products by Means of Sorbitol-Dehydrogenase
33	Determination of Glucose, Fructose and Sucrose in Chocolate and Sugar Confectionery Products by Means of Enzymes
34	Determination of Sugars in Chocolate and Sugar Confectionery Products by Means of High Performance Liquid Chromatography (HPLC)
35	Determination of Mono-Oleo disaturated Symmetrical Triglycerides (SOS) in Oils and Fats used in Chocolate and Confectionery Products by Thin-Layer Chromatography and Gas-Liquid Chromatography



36	Determination of Lactose in Chocolate and in Sugar Confectionery by Means of Enzymes
37	Determination of the Fat Content of Cocoa Powder by Soxhlet Extraction
38	Determination of the Sieve Residue of Cocoa Powder and of Cocoa Mass (Water Sieving Method)
39	Microbiological Examinations of Chocolate and other Cocoa Products <u>PRICE:</u> 30 €
40	Determination of the Red Colour Value of Cocoa Beans by Spectroscopy
41	Determination of the Composition of the Fatty Acids in the 2-Position of Glycerides in Oils and Fats used in Chocolate and Sugar Confectionery Products
42	Determination of Free Fatty Acid (FFA) Content of Cocoa Fat as a Measure of Cocoa Nib Acidity)
43	Determination of the Moisture Content of Cocoa Nib and Cocoa Beans
44	The Detection of Specific Off-Flavours in Cocoa Beans
45	A Cocoa Bean Sampling and Examination Plan to Determine the Average Quality and the Consistency of a Parcel
46	Viscosity of Cocoa and Chocolate Products
47	Determination of cocoa beans size distribution
48	Determination of ochratoxin A in liquorice products

PRICE: 15 € per Method

Please note that there is a 20 % discount for order of the complete set of methods of analysis and a 10 % discount for half package.



The following methods have been developed by ICA and may be obtained from the indicated organisation:

1965	Cocoa Butter Indices and their Determination (IUPAC - Methods)
1973	Cocoa Beans - Sampling (ISO Method n° 2292)
1973	Cocoa Beans - Specification (ISO Method n° 2451)
1977	Cocoa Beans - Cut test (ISO Method n° 1114)
1980	Cocoa Beans - Determination of moisture content (ISO Method n° 2291)



FACTSHEETS

Review the state of scientific knowledge on various subjects, and are designed for use by scientists and interested readers in our industry. They provide the common scientific understanding of the industry on various subjects such as: Dental caries - Diet and behaviour - Dietary fibre - Edible fats - Food additives/allergy & intolerance - Heavy metals - Methylxanthines - The Microbiology of confectionery - Nutritional goals & guidelines - Obesity - Pesticides - Role of diet in exercise - Salt - Sweetness - Sugars.

Please note that the factsheets on Methylxanthines and on the Microbiology of confectionery are currently being updated.

AVAILABLE FREE

HACCP BROCHURE

Describes the principles of the HACCP (Hazard Analysis and Critical Control Point) system as implemented in the cocoa, chocolate and sugar confectionery industry.

This HACCP Brochure is also available in French, German, Spanish and Dutch.

PRICE: 30 € + 15 € (bank and mailing costs)

GMP BROCHURE

This Code of Good Manufacturing Practice deals with general aspects of hygiene and food safety as well as with specific aspects of the cocoa, chocolate and confectionery industry.

This GMP Brochure is also available in French and Dutch.

PRICE: 30 € + 15 € (bank and mailing costs)



ARCHIVES OF COCOA RESEARCH

republished historic documents valuable to Cocoa Research

VOLUME I	contains a reprint of Pound's report on his Amazon river expeditions of 1938 and 1942 and other relevant papers (196 pages)
VOLUME II	contains translations of the more important parts of cocoa research in Indonesia 1900 - 1950 with special reference to: cocoa moth podborer, Helopeltis ants, black ants and botanic research (239 pages)
VOLUME III	is a comparative study of cocoa plantations in Surinam, Trinidad and Grenada, Venezuela, Equador and Central America made in 1900 in order to improve the quality of cocoa in Cameroun (125 pages)

<u>PRICE:</u> 40 €