

4. CHEMICAL & MICROBIOLOGICAL ANALYSES OF COCONUT PRODUCTS & BY-PRODUCTS

a. Laboratory Tests for Samples

Schedule of Availability of Services:

Monday - Friday

8:00 A.M. - 5.00 P.M. without noon break

Who may avail of the Service:

Coconut Manufacturers/ Processors

- Desiccators
- Charcoal Manufacturers
- Nata de Coco Processors
- Coconut Oil Millers
- Virgin Coconut Oil Producers
- Coconut Sugar Producers
- Coconut Products and By-products processors

Other Government Agencies

Private Sector/Individual

Academe

What are the requirements:

- Sample within the scope of the standard/test method
- Quantity of sample submitted is adequate

Note: Submit separate samples for chemical and microbiological analysis

Commodity	Amount of Sample Needed
■ Copra	5 kilos
■ Copra Meal/Pellets	2 kilos - 1.5 kilos (Chem. & Afla); 500 g. (micro)
■ Coconut Shell Charcoal	1 kilo
■ Coconut Oil (RBD, Crude, Cochin)	3 bottles (1liter/bottle)
■ Acid Oil, Fatty Acid Distillate	1 liter
■ Virgin Coconut Oil	2- 500mL (or in company's packaging taken from 1 production batch))
■ Desiccated Coconut	500 grams for every 100 bags per cut
■ Cooked Acidified Nata de Coco	1 bottle or can (as packed) for every 100 box
■ Raw and Processed (Low Acid) Nata de Coco	1 pack of 1 kilo for every 100 box
■ Coco Cream Powder, Creamed Coconut, Macapuno or Young Fruit Preserved, Frozen Coco Milk and Shredded Coconut	1 pouch/bottle/plastic (as packed) for every 100 box
■ Canned Coco Milk (Gata), Coconut Juice/Coco Water in cans or tetrapack	1 can or tetrapack (as packed) for every 100 box
■ Vinegar	250mL
■ Coconut Sugar	250 grams for every 100 box/packaging size
■ Coconut Flour	250 grams

- Condition of sample as received is acceptable
- Analysis required per commodity:
 - **Copra**

Oil Content	Color
Moisture	Aflatoxin B ₁
Free Fatty Acid	
 - **Copra Meal/Pellets**

Oil Content	Aflatoxin B ₁
Moisture	Salmonella
 - **Coconut Shell Charcoal**

Moisture	Volatile Combustible Matter
Ash	Fixed Carbon
 - **Coconut Oil (RBD, Crude, Cochin, Hydrogenated Coconut Oil, Paring Oil)**

Moisture & Impurities	Salmonella
Free Fatty Acid	E. Coli
Color	Aerobic Plate Count
Peroxide Value	Coliform Count
Iodine Value	Molds & Yeasts Count
Saponification Value	Staphylococcus
Acid Value	
Unsaponifiable Matter	
Specific Gravity	
Aflatoxin B ₁	
 - **Coconut Acid Oil or Coconut Fatty Acid Distillate**

Moisture & Impurities	Saponification Value
Free Fatty Acid	Saponifiable Matter
Color	Total Fatty Matter
Iodine Value	
 - **Virgin Coconut Oil**

Moisture & Volatile Matter	Salmonella
Free Fatty Acid	E. Coli
Color	Aerobic Plate Count
Peroxide Value	Coliform Count
Iodine Value	Molds & Yeasts Count
	Staphylococcus

■ **Desiccated Coconut**

Oil Content	Salmonella
Moisture	E. Coli
Free Fatty Acid	Aerobic Plate Count
Sulfur Dioxide	Coliform Count
Aflatoxin B ₁	Molds & Yeasts Count
	Staphylococcus

■ **Cooked Acidified Nata de Coco**

pH
Aerobic Plate Count
Physical & Sensory Evaluation

■ **Raw and Processed (Low Acid) Nata de Coco**

pH
Physical & Sensory Evaluation

■ **Coco Cream Powder, Creamed Coconut, Macapuno or Young Fruit Preserved, Frozen Coco Milk and Shredded Coconut**

■ **Canned Coco Milk (Gata), Coconut Juice/Coco Water in cans or tetrapack**

Salmonella	Coliform Count
E. Coli	Molds & Yeasts Count
	Aerobic Plate Count

■ **Vinegar**

Titrateable Acidity

■ **Coconut Sugar**

Water Activity	Coliform Count
Salmonella	Molds & Yeasts Count
E. Coli	Staphylococcus
	Aerobic Plate Count

■ **Coconut Flour**

Oil Content	Aerobic Plate Count
Moisture	Coliform Count
Free Fatty Acid	Molds & Yeasts Count
Salmonella	
E. Coli	

Duration: 5 - 10 working days

Step No.	Applicant/Customer	Service Provider	Duration of Activity (For 1 sample under normal circumstances)	Person In-Charge	Fees	Form
1	Submit the sample	Receive the sample in accordance with the requirements. Identify if: a) Export b) Referential c) Experimental d) Survey	5 minutes	Customer Service Staff	Acid Value 200.00 Aflatoxin B1 2,500.00 Ash 500.00 Color 100.00 Free Fatty Acid 200.00 (For Copra & DCN) 300.00 Iodine Value 200.00	
2	Read and Fill-out Forms: Customer's Contract (for new customer) and Test Request	Give 1 copy of the signed Customer's Contract to the customer while the other copy for PQCRD file	10 minutes	Customer Service Staff	Moisture 200.00 (For Acid Oil) 500.00 Oil Content 500.00 (For Copra) 560.00	1. ADM-SF01 Customer's Contract 2. ADM-SF02 Test Request
3		Record and Code the sample	10 minutes	Customer Service Staff	Peroxide Value 200.00 pH 100.00	
		For referential samples, prepare the Order of Payment in triplicate. Give 2 copies to the customer and attach the 3rd copy to the Test Request	5 minutes	Customer Service Staff	Physical & Sensory Evaluation 150.00 Saponifiable Matter 800.00 Saponification Value 500.00 Sulfure Dioxide 250.00 Specific Gravity 300.00 Titratable Acidity 200.00 Total Fatty Matter 800.00 Unsaponifiable Matter 800.00 Volatile Combustible Matter 400.00	ADM-SF03 Order of Payment for Samples
4	For payment: Present the Order of Payment to the Cashier	Cashier 6th floor, PCA R&D Bldg.		PCA Cashier	Salmonella 300.00 E. Coli 250.00 Aerobic Plate Count 250.00 Coliform Count 250.00 Molds & Yeasts Count 250.00 Staphylococcus 250.00	
5	Give one copy of the Claim Stub to PQCRD	Receive, record and attach the duplicate copy to the Test Request Label the sample Submit coded sample to the Analysts concerned for testing	5 minutes 5 minutes 5 minutes	Customer Service Staff Customer Service Staff Customer Service Staff		
		Testing of sample	Chemical: 3 - 5 working days Aflatoxin:	Sr. Science Res. Specialist Sr. Science Res.		

6	a) For referential samples, present Claim Stub. b) For export samples c) For experimental samples d) For survey samples	Data Processing (analysis results) Release results to the customer Submit to Market Regulation Division. Submit to the unit concerned Submit to the regional office concerned	3 - 5 working days Microbiological: 5 continuous working days 20 minutes 5 minutes	Specialist Sc. Res. Specialist Sr. Science Res. Specialist Sc. Res. Specialist Clerk Customer Service Staff		
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END OF TRANSACTION

b. Laboratory Tests for Shelflife Samples

- Virgin Coconut Oil
- Coconut Sugar
- Coconut Flour

Schedule of Availability of Services:

Monday - Friday
8:00 A.M. - 5.00 P.M. without noon break

Who may avail of the service:

- Virgin Coconut Oil Producers
- Coconut Sugar Producers
- Coconut Flour Producers

What are the requirements:

- All samples for 1 or 2-year shelflife period must be submitted in company's packaging coming from 1 production batch
- Amount of samples to be submitted depends on the company's packaging
- After passing the baseline analysis, a yearly payment of analysis is collected in advance
- For other details and clarification, please call PCA at 928-4501 to 09 local 521 or 532

Step No.	Applicant/Customer	Service Provider	Duration of Activity (For 1 sample under normal circumstances)	Person In-Charge	Fees	Form
1	Submit all samples for the whole shelflife period (same production batch)	Receive the sample in accordance with the requirements.	5 minutes	Customer Service Staff	Color 100.00 Free Fatty Acid 200.00 (For Copra & DCN) 300.00 Iodine Value 200.00	
2	Read and Fill-out Forms: Customer's Contract (for new customer) and Test Request	Give 1 copy of the signed Customer's Contract to the customer while the other copy for PQCRD file	10 minutes	Customer Service Staff	Moisture 200.00 (For Acid Oil) 500.00 Oil Content 500.00 (For Copra) 560.00	1. ADM-SF01 Customer's Contract 2. ADM-SF02 Test Request
		Record and Code the sample	10 minutes	Customer Service Staff	Peroxide Value 200.00 Salmonella 300.00	
		Prepare the Order of Payment in triplicate for the baseline analysis. Give 2 copies to the customer and attach the 3rd copy to the Test Request	5 minutes	Customer Service Staff	E. Coli 250.00 Aerobic Plate Count 250.00 Coliform Count 250.00 Molds & Yeasts Count 250.00 Staphylococcus 250.00 Water Activity 300.00	ADM-SF03 Order of Payment for Samples
3	For payment: Present the Order of	Cashier 6th floor, PCA R&D Bldg.		PCA Cashier		

4	Payment to the Cashier Give one copy of the Claim Stub to PQCRD	Receive, record and attach the duplicate copy in the Test Request	5 minutes	Customer Service Staff		
		Label the sample	5 minutes	Customer Service Staff		
		Submit coded sample to the Analysts concerned for testing	5 minutes	Customer Service Staff		
		Testing of sample	Chemical: 3 - 5 working days Aflatoxin: 3 - 5 working days Microbiological: 5 continuous working days	Sr. Science Res. Specialist Sr. Science Res. Specialist Sc. Res. Specialist Sr. Science Res. Specialist Sc. Res. Specialist Clerk		
5	Present Claim Stub	Data Processing (analysis results) Release results to the customer Prepare Order of Payment for 1 year testing.	5 minutes	Customer Service Staff		
6	For payment: Present the Order of Payment to the Cashier	Cashier 6th floor, PCA R&D Bldg.		PCA Cashier		
7	Give one copy of the Claim Stub to PQCRD	Receive, record and attach the duplicate copy in the Test Request	5 minutes	Customer Service Staff		
8	Wait for the result as scheduled	Testing of sample as scheduled	Chemical: 3 - 5 working days Microbiological: 5 continuous working days	Sr. Science Res. Specialist Sr. Science Res. Specialist Sc. Res. Specialist		

End of Transaction