

# CMBTC PROCESSING & ANALYTICAL SERVICES



The following processing and analytical services are available at the CMBTC. Where multiple samples are run at once, additional discounts may apply. CMBTC members receive discounts off base prices for all processing and analytical services.

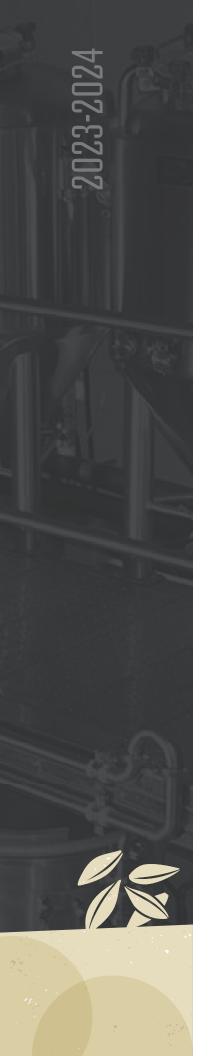
All prices are in Canadian dollars.

Membership Tier*	Discount
Voting and Tier 1	25%
Tier 2	20%
Tier 3	15%

<sup>\*</sup>See CMBTC Membership Schedule for details.

Catalogue #	Barley Analysis	Cost per Sample	Sample Quantity Required
CMBTC1000	Comprehensive Includes moisture, protein (NIR), sizing, germination energy, water sensitivity, 1000 kernel weight, RVA	\$125	400 g
CMBTC1010	Protein & Moisture (NIR)	\$25	100 g
CMBTC1020	Moisture (oven)	\$25	100 g
CMBTC1030	Protein (Leco)*	\$50	100 g
CMBTC1040	Sizing	\$25	100 g
CMBTC1050	Germination Energy	\$25	100 g
CMBTC1060	Water Sensitivity	\$25	100 g
CMBTC1070	Germination Capacity	\$25	100 g
CMBTC1080	1,000 Kernel Weight	\$25	100 g
CMBTC1090	Test Weight	\$25	100 g
CMBTC1100	Rapid Visco Analysis (RVA)	\$50	100 g
CMBTC1110	Vomitoxin/Deoxynivalenol (DON)	\$50	100 g

<sup>\*</sup>Based on minimum 10 samples.



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Catalogue #	Malt Analysis	Cost per Sample	Sample Quantity Required
CMBTC2000	Comprehensive (Wet Chemistry) Includes moisture, friability, fine extract, coarse extract, total and soluble protein (Kolbach Index), diastatic power, α-amylase, viscosity, wort colour, pH, β-glucan, FAN	\$175	500 g
CMBTC2010	Basic Malt Analysis Includes moisture, friability, fine extract, total and soluble pro- tein (Kolbach Index), viscosity, wort colour, pH, ß-glucan, FAN	\$125	500 g

Catalogue #	Beer Analysis	Cost per Sample	Sample Quantity Required (bottle)
CMBTC3000	Comprehensive Extract, alcohol, calories, color, pH, foam (NIBEM), CO <sub>2</sub> , bitterness (IBU), beer turbidity (FTU)	\$195	12
CMBTC3010	Basic Analysis Extract, alcohol, color, pH, calories	\$50	2
CMBTC3020	CO <sub>2</sub>	\$25	3
CMBTC3030	Fermentable Carbohydrate Profile (by HPLC) Maltriose, maltose, glucose, fructose	\$100	2
CMBTC3040	Foam (NIBEM)	\$50	3
CMBTC3050	Bitterness (IBU)	\$75	2
CMBTC3060	Chill haze and forced turbidity	\$50	3
CMBTC3070	Diacetyl by gas chromatography	\$100	2



# MICRO & PILOT MALTING & BREWING TRIALS



The CMBTC performs micro and pilot malting and brewing trials for members. Technical staff can work with parties to tailor processing protocols. Please note additional costs may apply depending on the project.

Standard Pilot Malting Trial, 60 kg Includes barley and malt analysis and all processing results.	\$2,500
Micro-malting Trial Standard Micro-Malting Trial (up to 40 samples) Per sample (~500 grams)	\$2,500 \$125
Barley, malt analysis not included. Where multiple samples are run at once, additional discounts ma	ay apply.

Standard Pilot Brewing Trial, 2.5 hl*	\$1,200
Additional costs: Fermentation (up to 7 days), including basic beer analysis Filtration Packaging (cans, up to 48)	\$875 \$850 \$850
Small Pilot Brewing Trial, 10L Two Small Pilot Brews (completed in one day)	\$750 \$1,000
Additional costs: Fermentation (up to 7 days), including basic beer analysis	\$400

<sup>\*</sup>Additional costs may include brewing materials, packaging, shipping, mash filter operation, specific beer analysis, additional fermentation and/or lagering time. Each 2.5hL pilot brewing trial includes processing data (conversion time, lautering performance, turbidity, wort analysis) as well as forced fermentation analysis. Each small brew includes conversion time, wort analysis and forced fermentation analysis



## SAMPLE ANALYSIS REQUEST/CHAIN OF CUSTODY FORM



#### TO REQUEST SERVICES:

Please email servcies@cmbtc.com to request a quote and schedule processing or analytical services with the CMBTC.

### PLEASE MARK SHIPMENT AS FOLLOWS:

Samples for Analysis Only, Not for Human Consumption

### **SEND TO:**

### **Canadian Malting Barley Technical Centre**

1365-303 Main Street Winnipeg, Manitoba Canada R3C 3G7

Date sent:
Client requesting sample:
Telephone number:
Email analyses to:
Email invoice to:
Payment method:

Sample Description/ID	Product Type	Catalogue # and Analysis Description

#### SAMPLE RECEIPT / CUSTODY / STORAGE

All samples submitted, as well as sample containers, will be retained for a period of 30 days for most samples, and 14 days for liquid samples. Samples can be stored beyond the normal retention period at the client's request, which are subject to a storage surcharge. Return of samples and containers to the client may be done by written request only, and is at the discretion of the CMBTC.

