

## Clearbrew® 60/43 Liquid Adjunct

### Product Information

Cargill's Clearbrew® 60/43 Liquid Adjunct is a pure, food grade, clear liquid brewing adjunct which has a high concentration of fermentable sugars and is ideal for the production of full-bodied beers. Clearbrew® 60/43 Liquid Adjunct is manufactured by an acid-enzyme process specifically to meet the quality standards of the brewing industry.

### REPRESENTATIVE CHEMICAL AND PHYSICAL DATA

#### Chemical and Physical Properties

Refractive Index (45°C)	1.4918 – 1.4950
Total Extract (%)	81.3 – 82.5
Sulfated Ash (%)	0.4 max
Protein (%)	0.07
pH (1:10)	4.5 – 5.3
Sulfur Dioxide (ppm)	40 max
Conductivity (30% DS)	1000 micromhos
Calories/100 g	326

#### Typical Carbohydrate Profile

(% Dry Basis)

Dextrose	31
Maltose	36
Maltotriose	10
Higher Saccharides	23
Total Fermentables (DP1+DP2+DP3)	75-79

#### Microbiological Limits

Mesophilic Bacteria	1,000 cfu/10g max
Yeast	100 cfu/10g max
Mold	100 cfu/10g max

### Sensory Characteristics

Appearance	Clear Liquid
Taste	Sweet, Bland
Odor	Characteristic

### Density and Viscosity Factors

Temp (°F)	Specific Gravity (Temp°F/60°F)	Pounds/Gallon (Temp°F)	Pounds/Gallon (DSB)	Viscosity (cP)
80	1.4264	11.89	9.74	100,000
90	1.4233	11.87	9.72	47,000
100	1.4201	11.84	9.70	22,000
110	1.4169	11.81	9.67	13,000
120	1.4136	11.79	9.65	6,500
140	1.4069	11.73	9.61	2,000

### Regulatory/Labeling Data

United States

GRAS Affirmation Labeling CFR 21 184.1865 Corn Syrup

Canada

FDR Labeling B.18.016 Glucose Syrup; Glucose (contains sulphites)

### Shelf Life and Storage

The recommended storage temperature range for Clearbrew® 60/43 Liquid Adjunct is 110 - 130°F. Syrups stored for extended periods (over 6 months) should be evaluated periodically for fitness of use.

contact

#### Sweeteners Regional Offices

2173 Embassy Drive Lancaster, PA 17603 Tel: 800-734-8215 Fax: 717-431-3120	400 E. Diehl Road, Suite 330 Naperville, IL 60563 Tel: 800-344-1633 Fax: 630-505-7846
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Updated 16-Aug-12

## Clearbrew<sup>®</sup> 60/43 Liquid Adjunct

### Nutritional Information

#### Nutritional Profile

The following typical information may be of use in answering questions regarding ingredients in corn sweeteners. Unless specified otherwise, all values are reported on a commercial or "as is" basis.

Nutrient	Amount	Nutrient	Amount
Calories	326 cal/100 g	Cadmium	< 0.05 mg/100 g
Moisture	18.1 g/100 g	Caffeine	< 0.50 mg/100 g
Protein	0.07 g/100 g	Calcium	< 10 mg/100 g
Ash	0.30 g/100 g	Chloride	< 150 mg/100 g
Total Carbohydrate	81.6 g/100 g	Chromium	< 0.05 mg/100 g
Simple Sugar* (DSB**)	67.0 g/100 g	Copper	< 0.10 mg/100 g
Total Fat	< 0.10 g/100 g	Fluoride	< 0.10 mg/100 g
Dietary Fiber	< 0.10 g/100 g	Iron	< 0.30 mg/100 g
Cholesterol	< 0.10 mg/100 g	Lead	< 0.01 mg/100 g
Trans Fatty Acid	< 0.10 g/100 g	Magnesium	< 5.0 mg/100 g
Biotin	< 0.01 mg/100 g	Manganese	< 0.05 mg/100 g
Niacin	< 0.05 mg/100 g	Mercury	< 0.05 mg/100 g
Pantothenic Acid	< 0.30 mg/100 g	Molybdenum	< 0.10 mg/100 g
Riboflavin	< 0.01 mg/100 g	Phosphorus	< 0.01 mg/100 g
Thiamin	< 0.05 mg/100 g	Potassium	< 0.10 mg/100 g
Vitamin A	< 15 IU/100 g	Selenium	< 0.10 mg/100 g
Vitamin B <sub>6</sub>	< 0.05 mg/100 g	Sodium	< 100 mg/100 g
Vitamin B <sub>12</sub>	< 0.30 mg/100 g	Sulfur Dioxide	< 4.0 mg/100 g
Vitamin C	< 0.05 mg/100 g	Zinc	< 1.0 mg/100 g
Arsenic	< 0.10 mg/100 g		

\* DP<sub>1</sub> + DP<sub>2</sub>

\*\* Dry Solids Basis

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