

Caramel Color Specifications & Technical Data

Liquid Caramel colorZHDS15

Description:

ZHONGHUI Caramel Color, E150d, the color additive Caramel is the dark brown liquid or solid material resulting from the carefully controlled heat treatment of food-grade carbohydrates. Certain food-grade acids, alkalis and salts may be employed to assist caramelization.

CAS n°:8028-89-5 / EINECS:232-435-9

Application

It is typically used in cola, beverages, seasoning sauce, condiments, bakery, biscuits, etc. Please refer to the related laws and regulations in dosage in your country.

Ingredient Statement

Caramel Color Double Strength Acid proof

Organoleptic Properties

Appearance: Dark brown, fluid liquid
Odor: Typical
Taste: Characteristic bitter, burnt sugar taste

Chemical/Physical properties-Specifications(as manufactured)

Tinctoral Power: 0.385-0.425(560nm, 0.1% solution), Absorbance units
Ph: 2.8-3.1(as is)
Baume: 28.8-29.2@60°F (15.5°C)
Specific Gravity: 1.248-1.252@60°F (15.5°C)

Chemical/Physical Properties-Indicative values

Color Intensity: 0.265-0.275(610nm, 0.1% solution), Absorbance units
Dry Matter: 51.1%
EBC: 70000-73000
Brix Value: 62
Density: 10.39-10.43(lb/gal@60°F (15.5°C))

EBC Determination:

Lab Temperature: 16-22°C, 0.5g sample (accurate to 0.002g) was measured, dissolved in water, transferred to 500ml volumetric bottle, diluted with water to the scale, shaken well, if the solution is cloudy, should be centrifugal settlement, sample solution. The sample solution was placed in a 1cm colorimetric dish, water was used as a blank control, and its absorbance was determined at 610nm with a spectrophotometer (the absorbance is recommended to be controlled between 0.2-0.8, otherwise the sample solution concentration should be adjusted and the absorbance should be determined again).

$EBC = \text{Absorbance unit} * 20000 / 0.076$

Dry Matter Determination:

Place the refractometer in a well-lit position, connect it with a constant temperature water bath, and adjust the temperature of the prism of the refractometer to 20°C. Separate the two prisms, add a small amount of sample 1-2 drops to the fixed prism surface with the glass rod (the glass rod shall not touch the prism surface, and the coating time shall be less than 2 seconds), immediately close the prism and stay for a few minutes. Bring the sample to the temperature of the prism. Adjust the spiral of the prism until the field of view is divided into two parts, turn the compensator knob to eliminate the rainbow and make the division of light and shade clear. Continue to adjust the helix to align the light and shade line on the cross line, read the refractive index (reading accuracy to 0.0001) from the ruler, repeat the reading immediately, and take its average value as the primary measurement value. Clean and dry the two prisms. Measure the same sample a second time according to

the above operation. Take the average value of the two measurements.

Microbiological properties

Aerobic Plate Count:	<200 cfu/g
Yeast:	<10 cfu/g
Mold:	<10 cfu/g
E. coli:	<3 MPN/g
Salmonella:	Negative/25g

Heavy Metals

Arsenic:	<0.1 ppm
Lead:	<0.1 ppm
Mercury:	<0.01 ppm
Cadmium:	<0.1 ppm

GMO/Genetically Engineered(GE) status

GE:	Manufactured from HDCS which is derived from genetically engineered plants. PCR negative
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Raw Material

Carbohydrate source:	High Dextrose(aka Glucose) Corn Syrup(HDCS)
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Conformity & Use

Conformity:	21 CFR 73.85, 21 CFR 182.1235(GRAS), GB 1886.64-2015, FCC
Use:	Follow Good Manufacturing Practices(GMPs)

Packaging, Storage Conditions, Best Used within

Packaging:	30kg per drum(800 drums in 20ft container without pallet), 270kg per drum(80 drums in 20ft container without pallet)
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Storage conditions: Cool and dry environment, preferably not to exceed 90°F (32°C) . Product should not be allowed to freeze.

Best Used Within: 24 months from date of manufacturer

Allergens

No protein allergens present. Derived from corn. Gluten-free by source. Sulfites present (as process reactants)

Disclaimer

The information provided in this Product Specification & Technical Data document relates only to the specific product designated and may not be applicable when such product is used in combination with other materials or in any process. All information and instructions provided in this Product Specification & Technical Data document are based on the current state of our knowledge at the latest revision date indicated. It is the responsibility of the user to be aware of and to follow the regulations applying to our product for its possession, handling and use.

Nutrition Data is compiled from the average analysis of typical batches of this product. It is the final user's responsibility to determine the nutritional content of their product. Nutrition Data is for guidance only.

Nutrition Data(per 100g)

Calories	80 Calories(kcal)
Kilojoules	335 Kilojoules(KJ)
Moisture	48.9* g
Total Fat	0* g
Saturated Fat	0 g

Trans Fat	0 g
Cholesterol	0 mg
Sodium	25 mg
Total Carbohydrates	43.9* g
Dietary Fiber	0 g
Total sugars	3.9 g
Added Sugars	0 g
Protein	0* g
Total Nitrogen	3.3* g
Total Sulfur	3.5* g
**Sulfite	<1400 ppm
Sulfur Dioxide	0.2 g
Ash	0.4* g
Fat	0 g
Fiber	0 g
Salt	0 g
Total Analysis	100.0 g

Standard: GB1886.64-2015