

Kusum

Caramel Colour



THE GROUP



Kusum Group of Companies is involved in Business activities in diversified areas like Iron & Steel, Invert Sugar Syrup and Caramel, Commodities, Lead, and Education. The Group was founded by Late Shri A.P. Goyal under whose stewardship and vision the group has grown in leaps and bounds.

As per his vision the group has core fundamental of "we value relationship". Invert Sugar India Pvt. Ltd. (ISIPL) was established in the Year 1997 ,having an experience of over One and a Half Decade of serving the Quality Conscious Food and Beverages Manufacturers across India.

AWARDS & RECOGNITIONS

Our Technology is Licensed through Tripartite Agreement with **National Research Development Corporation (NRDC) and Bhabha Atomic Research Center(BARC)**.

Technology development and Upgradation was done at our own In-house R&D Lab recognised by **Department of Science and Industrial Research, Government of India**. Project approved and aided by **Ministry of Food Processing Industry, (MOFPI) Government of India**.



KEY FEATURES OF MANUFACTURING FACILITY

The only ultra modern caramel manufacturing plant in Madhya Pradesh

Production process completely mechanized and automated based on latest technology.

Just In Time delivery approach

Well developed and modern In-House Research & Development and testing facility

Trusted and established name for high quality products .

THE PRODUCT

Caramel Color is a dark brown liquid material derived from controlled heat treatment of fine grade crystal sugar with or without some additive reagent. It is defined and regulated as a food color additive. Internationally the FAO/WHO Joint Expert Committee on Food Additives (JECFA) has divided Caramel Colour into four classes depending on the food grade reactants used in its manufacturing:

- >> E 150 a - Class I is Plain Caramel Color
- >> E 150 b - Class II is Sulphite Process Caramel Color
- >> E 150 c - Class III is Ammonia Process Caramel Color
- >> E 150 d - Class IV is Sulfite Ammonia Process Caramel Color

Class I KUSUM GOLD CARAMEL

PLAIN /BURNT /CARAMELIZED
SUGAR SYRUP



A unique natural manufacturing process is used in creating an ingredient that has the clean taste as well as colour that is ideal for food products. Since colour is a critical component of any food product,. Kusum Gold Caramel does not have any of the off-notes and side effects. Kusum Gold Caramel is a stable ingredient and perfectly suited for a variety of food and beverage applications; in other words, any product where taste as well as color is of the utmost importance. Consumers will enjoy a mouth watering product - natural color , flavor, without the negative side effects associated with some artificial food color substitutes. Kusum gold caramel is best suited for **Bakery** and **Confectionary** Industry.

KUSUM CAUSTIC CARAMEL

CAUSTIC /SPIRIT CARAMEL



The Kusum Caustic Caramel is produced by carefully controlled heat treatment of finest quality of crystal sugar with acids, alkalies or salts in the absence of both sulphite and ammonium compounds. The Kusum Caustic Caramel Color offered by us is a Spirit soluble Caramel used by the Spirit Industry to color blended **Whisky, Rum, Brandy and other Alcoholic Beverages**. It has a medium coloring power but exhibits good sunlight stability. We ensure all the products offered by us meet all the standards and specifications for Caramel as specified by Health Authorities and the Bureau of Indian Standards(BIS).

Class II

KUSUM SULPHITE CARAMEL

This Caramel is produced by a carefully controlled heat treatment of food grade finest quality of crystal sugar in the presence of sulphite compounds. No ammonium compounds are used. It carries a negative ionic charge. This Grade caramel is used in **Whiskies, Brandies, Tea, Distillery Industries.**

Class III

KUSUM AMMONIA CARAMEL

Class III Caramel colour is manufactured by the carefully controlled heat treatment of finest quality of crystal sugar in the presence of ammonium compounds and, with or without acids, alkalies or salts. No sulphite compounds are used. It is a positive ionic charge caramel colour and largely used in **Beer, Malted Foods, Soy Sauce, Dairy Products and Protein Drinks.**



Class IV

AMMONIA SULPHITE CARAMEL

Class IV Caramel colour is the most widely used colorant in the soft drink industry. Because of the low pH of most carbonated beverages, E150d (Class IV) caramel colours are required for their acid stability. In addition to providing excellent reddish to brown hues, caramel colour can enhance soft drinks foaming characteristics, mouth feel, and flavour. Typical examples are colas, root beers, ginger ales, etc. In beverage concentrates, caramel colour has an emulsifying effect with the flavour oil. Caramel colour also functions as an emulsifying agent and helps eliminate the formation of certain types of flocculation.

Caramel colour's light protective quality also assists in preventing oxidation of the flavouring components in bottled beverages. Beverage manufacturers sometimes use the terms of “**single strength**” and “**double strength**”. They are general terms describing the relative colour strength of caramel colour and may cover different ranges of colour. Double strength caramel colour was originally developed for use in dietetic beverages .

However, double strength caramel colour also offers greater cost efficiency, which has contributed to its rapid acceptance. It is best to evaluate the specific application to determine the appropriate caramel colour.



COLOUR SPECIFICATION

PARTICULARS	TYPE-I	TYPE-II	TYPE-III	TYPE-IV
PROCESS	PLAIN PROCESS	SULPHITE PROCESS	AMMONIA PROCESS	SULPHITE AMMONIA PROCESS
	Plain Caramel, Caustic Caramel, Spirit Caramel.	Caustic Sulphite Caramel	Ammonia Caramel Baker's Caramel Confectioner's Caramel Beer Caramel	Sulphite Ammonia Caramel, Acid Proof Caramel, Soft Drink Caramel
	<i>Negative Caramel Colour</i>	<i>(Spirit Soluble, Red Tone Negative Caramel Colour)</i>	<i>(Low Sulphite, Positive Caramel Colour)</i>	<i>(Acid Proof, Negative Caramel Colour)</i>
APPLICATION	Carbonated Beverages, Liquors, Sauces, Confectionery, Bakery	Whiskies, Brandies, Confectionaries, Distillery Industries	Beer, Malted Foods, Say Sauce, Dairy Products, Protein Drinks	Carbonated Beverages, Country Liquor, Rums, Sauces, Confectionery, Pharmaceuticals
EEC No.	E150a	E150b	E150c	E150d
DESCRIPTION	The Kusum Caramel Grade-I is produced by carefully controlled heat treatment of food grade carbohydrates with or without acids, alkalies or salts in the absence of both sulphite and ammonium compounds.	The kusum sulphite Caramel is produced by a carefully controlled heat treatment of food grade carbohydrates with or without acids, alkalies or salt in the presence of sulphite compounds. No ammonium compounds are used.	The kusum ammonia Caramel is produced by a carefully controlled heat treatment of food grade carbohydrates with or without acids, alkalies or salt in the presence of ammonium compounds. No sulphite compounds are used.	The kusum ammonia - sulphite Caramel is produced by a carefully controlled heat treatment of food grade carbohydrates with or without acids, alkalies or salt in the presence of sulphite & ammonium compounds
PHYSICAL & CHEMICAL SPECIFICATIONS:				
Colour Intensity Percentage by Mass	0.01 - 0.12	0.06 - 0.10	0.08 - 0.36	0.10 - 0.60
Baume @ 15.5°C	39.6 - 40.0	37 - 38	34.7 - 36.3	28.80 - 29.20
Specific Gravity @ 20°C	1.2468 - 1.2511	1.341 - 1.354	1.315 - 1.3327	1.25 - 1.28
PH "as is "	2.7 - 3.0	2.9 - 3.3	4.1 - 4.8	2.8 - 3.3
Ionic Character (Colloidal Charge)	Negative	Negative	Positive	Negative
MICROBIOLOGICAL SPECIFICATION				
Standard Plate Count/g Max	200	200	200	200
Yeast/g Max.	10	10	10	10
Mold/g Max.	10	10	10	10
E.coli/g (MPN)	Less than 3	Less than 3	Less than 3	Less than 3
Salmonella/25g	Negative	Negative	Negative	Negative
PACKAGING	As per requirement	As per requirement	As per requirement	As per requirement
STORAGE CONDITIONS :	Not to be exposed to direct sun light. To be stored in dry environment below 32°C	Not to be exposed to direct sun light. To be stored in dry environment below 32°C	Not to be exposed to direct sun light. To be stored in dry environment below 32°C	Not to be exposed to direct sun light. To be stored in dry environment below 32°C
SHELF LIFE	Though shelf life is One year under the above mentioned storage conditions, Good manufacturing practice recommends that product be rotated every year.	Though shelf life is One year under the above mentioned storage conditions, Good manufacturing practice recommends that product be rotated every year.	Though shelf life is One year under the above mentioned storage conditions, Good manufacturing practice recommends that product be rotated every year.	Though shelf life is One year under the above mentioned storage conditions, Good manufacturing practice recommends that product be rotated every year.

CERTIFICATIONS

ISO 9001 :2000

ISO 14001:2004

ISO 18001:2007

ISO 22000:2005

FSSAI LICENSED

HALAL CERTIFIED*

GLUTEN FREE*

KOSHER CERTIFIED*

USFDA*

Absence of
Allergen
Statement

Absence of
Chemicals

Absence of
Gluten

Absence of
GMOs

Absence of
GMOs for CS and
Sucrose based
Caramel Colors

Country of Origin

Shelf Life Liquid

Sulfite Statement





*Get coloring redefined
The Kusum caramel way.....*

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