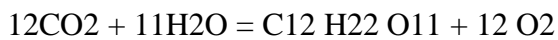




KNOWING SUGAR

Sugar an important food also commonly known as sucrose is white crystalline substance, tastes sweet, a carbohydrate and 100% soluble in water. Sugar (Sucrose) is a natural combination of fructose and glucose. It is very stable product.

CHEMICAL FORMULA FOR SUGAR:



TYPES OF SUGAR:

Raw	Refined	Crystal
Muscavado	Demerara	Caster
Icing	Premium Liquid Sugar	Fine Liquid Sugar
Invert	White Crystal	Refined - Fine Granulated

RAW MATERIALS FOR SUGAR:

Sugar Cane -- a large tropical grass
Beet Root
Other items used are Corn (only used for sweeteners)

HOW IS SUGAR MADE?

Raw Sugar is made in large refineries by crushing cane sugar (*Sachrum officinarum*) or beet root (*Beta vulgaris*) to obtain juice and boiling this juice to remove water and processing the juice so obtained to make unrefined raw sugar. This is sometimes also known as panela. Generally cane sugar is produced by tropical countries and the beet sugar by the cold/European areas.

COUNTRY OF ORIGIN:

Australia	Brazil	Colombia	Cuba
India	Indonesia	Pakistan	Poland
Turkey	Mexico	Russia	UK
USA	West Indies	Others	

WORLD'S SUGAR PRODUCTION:

The world at the moment is annually producing about 133 million tonnes. There are 110 countries involved in its production. It is estimated that 25 million tonnes is dumped on the world market below the market price.



PACKING FOR SUGAR:

Sugar can be packed in minute sachets of 10 grams to 50kg or even larger packing sizes. Popular packed sizes are 500gms, 1kg, 2kg, 12.5kg, 25 kg and 50 kg.

SUGAR STANDARDS & SPECIFICATIONS:

REFINED SUGAR GRADE A - ICUMSA 45

Origin	:	Brazil
Icumsa	:	45 RBU
Polarization	:	99.80% Min
Ash content	:	0.04% Max
Moisture	:	0.04% Max
Solubility	:	100% Free Flowing
Radiation	:	Normal Certified
Colour	:	Sparkling White
Granulation	:	Fine

CANE SUGAR - ICUMSA 100

Specifications:

Icumsa	:	100 RBU
Polarization	:	99.50% min
Ash content	:	0.15% Max
Moisture	:	0.10% Max
Solubility	:	100% Free Flowing
Radiation	:	Normal Certified
Colour	:	White
Granulation	:	Fine

RAW BROWN CANE SUGAR GRADE E ICUMSA 600-1200

Origin	:	South America/Brazil
Icumsa	:	600 – 1200
Polarization	:	96.00% Min
Ash content	:	0.09% Max
Moisture	:	0.09% Max
Colour	:	Brown
Solubility	:	90% Free Flowing
Granulation	:	Fine
SO ₂	:	20 PPM



RAW BROWN SUGAR ICUMSA 750-1000

Origin: Brazil or seller's option

Icumsa 750-1000 RBU Max.

Polarisation: 98 % Min.

Ash 0.06 % - 0.07 % Max

Colour: Light Brown

Solubility: 95 % Free Flowing

Granulation: Regular

Radiation: Normal

Crop: Current

RAW BROWN SUGAR ICUMSA 1000 - 3000

Origin: Brazil or seller's option

Polarisation: 98.8 %

Moisture: 0.08 % max

Ash Content: 0.06 %

Solubility: 90 % Dry Free Flowing

Granulation: Regular

Colour: Brown

Radiation: Normal

Crop: Current

BEET SUGAR

Icumsa : 45 - 100 RBU

Polarization : 99.80% Min

Ash content : 0.04% Max

Moisture : 0.04% Max

Solubility : 100% Dry & Free Flowing

Radiation : Normal without presence of caesium or iodine

Colour : Sparkling White Crystal

Granulation : Fine to Medium

Reducing Sugar : 0.05% Max by weight



ICUMSA –

International Commission for Uniform Methods of Sugar Analysis

MEANING AND WORKING

ICUMSA is a world-wide body which brings together the activities of the National Committees for Sugar Analysis in more than thirty member countries. Work is carried out under various Subject headings, each headed by a Referee.

Methods are recommended for tentative approval by ICUMSA in the first instance. Upon meeting all of the Commission's requirements, methods are accorded official status. Methods which are demonstrably useful and have found an established application, or which do not lend themselves to collaborative testing are given an Accepted status"

An ICUMSA rating is an international unit for expressing the purity of the sugar in solution, and is directly related to the colour of the sugar. Be aware that there are different types of ICUMSA units. For Brazilian sugar, the lower the ICUMSA figure the whiter the sugar. However, this is not the case in the E.U. for some unknown reason, which has been the subject of much discussion.

SGS of Sao Paulo has published specifications for ICUMSA numbers for E.U. product which run contrary to the Brazilian specifications; for example, in Brazil SGS has an ICUMSA rating of 45 rbu for refined, indicating the highest quality, with other grades of lower quality (such as Special Extra Crystal) having a higher ICUMSA of 150 and so forth. This rating method is confirmed by the Institute of Sugar and Alcohol in Brazil.

The TU is heavily dependent upon "ash points", which are defined as "Conductivity ash, % , expressed to three decimal places" (British Sugar Corp., Central Laboratory, ICUMSA Headquarters). Further used to weight the TU is "reflectance Grade Colour" and "Solution Colour" or "Filtered Colour" as it is referred to, which have formulas for determination equally confusing as the one for "Ash Points". Thus, as you see, this is not easily understood by the novice.