

SOUTHERN HYDROCARBONS

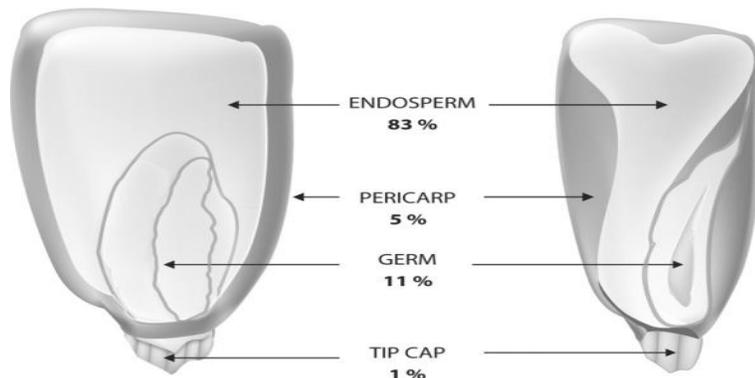
PRODUCT APPLICATION SHEET

PRODUCT NAME: Maize Starch

MAIN USE

Maize starch chemical formula $(C_6H_{10}O_5)_n$ also known as Corn starch or flour is a fundamental ingredient in most of the packaged food and industrial products; it is extracted from the corn kernel and has a distinctive appearance and feed. Maize starch in natural, modified, pre-gelatinized and dextrinized forms provides viscosity, texture and other desired properties to all types of food & paper, products from canned chilled frozen to microwaveable goods, dry mixes and extruded snacks. Practically every industry in existence uses starch or its derivatives in one form or another.

SPECIAL FEATURES



Native starch is used to provide dry strength and as a surface improvement aid in alkaline papermaking, starch is a critical part of wet-end sizing it is an integral part of micro-particle retention and works as a binder water holding agent and carrier for surface sizing chemicals and other functional additives. In the manufacture of textiles starch keeps the yarn straight and strong significantly improving its ability to chemical's withstand the stress of weaving.

The maize starch is known to form the basic constituent of sweet food. Another property of the maize starch is that it can form a smooth paste within a short interval of time. Another reason for which the maize starch is used on a large scale lies in the fact that they can be dispersed with much ease in the hydrophilic Medias. The starch has an ample amount of carbohydrate and thus it is known to be among the energy producing food. The maize contains starch by a percentage of 66, which can be extracted from the maize from various means. Steeping, grinding, drying and purifying are the essential processes that are being used for the extraction of starch from maize.

The maize starch is also known to have the best usages in various other industries. Paper industry, textile industry, pharmaceutical industries are some of the common places where the maize starch has high usages. In the paper industries, the paper industries are used on a large scale as the surface sizing agents. The starch can also be used in the paper industries for enhancing the strength of paper. The appearance of paper can be improvised in a perfect manner with the use of maize starch. The paper is also used as a binder in the industries.

CHARACTERISTICS AND SPECIFICATIONS

S.No	Parameters	Specification	Result
1	Appearance	White Color Free Flowing Powder	Complies
2	Odour	Odorless	Complies
3	PH(10% ag. slurry)	4.5-7.0	6.02
4	Particle size (Retention on 100 mesh)	1.0% Max	0.45%
5	Moisture% w/w	10.0% to 13.5%	11.80%
6	Starch content on dry basis	98% Min	98.60%
7	Total Ash on DB cold water	0.2 - 0.5	0.25
8	Brightness	88.0 PV min	90.60
9	Brookfield Viscosity (5% paste at 75°C)	1600 cps Min	1800 cps
10	Free Acidity (ml of 0.1N NaOH/100gms)	40 ml Max	18 ml
11	Protein % (on D.B)	0.45 Max	0.20
12	Sulphur Dioxide (PPM)	50.00 Max	42.00
13	Fiber	0.05 to 0.10	0.09
14	Packing size	50 kg per bag / Jumbo Bag	--