Soy Lecithin

Composition

Soy lecithin consists of three types of phospholipids; phosphatidylcholine (PC),phosphatidylethanolamine (PE) and phosphotidylinositol (PI). It is extracted from soybean oil and is generally used as a natural emulsifier or stabilizer in various food applications.

Processing

Lecithin is a combination of naturally-occurring phospholipids, which are extracted during the processing of soybean oil. The soybeans are tempered by keeping them at a consistent temperature and moisture level for approximately seven to 10 days. This process hydrates the soybeans and loosens the hull. The soybeans are then cleaned and cracked into small pieces and the hulls are separated from the cracked beans. Next, the soybean pieces are heated and pressed into flakes. Soybean oil is extracted from the flakes through a distillation process and lecithin is separated from the oil by the addition of water and centrifugation or steam precipitation1

Functional Benefits

Normaly Lecithin used as an Emulsifier, Wetting Agent, Dispersing Agent, Stabilizing Agent, Viscosity Reducing Agent, Anti-spattering Agent, Mixing and Blending Agent, Release Agent, Conditioning, Lipotropic, Surface Active Agent & as an Emollient & Anti-Oxidant as well. Lecithin also has some important Nutraceutical properties like it Decrease level of cholesterol and harmful lipids, Supplies polyunsaturated fatty acids, Provides Phosphatidyl Choline; an Essential Phosphalipids, Protection against fatty degeneration of the Liver / brain, Improves memory function, Promoted ability to concentrate, Controls Lipometabolic Disorders.

Feed Industry

Specifications of Non GMO Lecithin Feed Grade

Description
Specifications
Method Of Analysis

Appearance
Semi Liquid
Colour
10- 12 Max
Gardner Scale
Moisture
Max. 1.0%
IS : 548 (Part 1) 1964
Acid Value

Max. 35 KOH/g Max

IS : 548 (Part 1) 1964

Peroxide Value

Max. 5.0 m.eq

IS : 548 (Part 1) 1964

Hexane Insoluble

Max. 1.0 % C

USP. NF - 18 : Method	: 1(921)

Acetone Insolubles

Min. 60%

USP. NF - 18 :
Page : 2259

pH Value

7

By pH Meter

Viscosity

80 - 120 Poise

Brookefield Viscometer

Microbial Count

Total Plate Count cfu / gm

3000 Max.

IS : SP : 18 (Part I) 1980

Coliforms cfu / gm

Nil

IS : SP : 18 (Part I) 1980

E. Coli. cuf / gm

Nil

IS : SP : 18 (Part I) 1980

Yeast & Mould cfu / gm

100 Max.

IS : SP : 18 (Part I) 1980

Salmonella 25/ gm

Nil

IS : SP : 18 (Part I) 1980

Applications

1. Poultry Feed
2. Pig Feed
3. Cattle Feed
4. Sheep
5. Ruminants
6. Shrimp Feed
7. Fish Feed
8. Pet Foods

Functionalities

- It Enriches fat and Proteins.
- It improves palletization of products.

Soya Lecithin Oil (Poultry Feed Grade)

Lecithin is successfully used in the poultry feed in the United States and European countries. Inspired by this our R & D has introduced a new products poultry feed grade lecithin oil. Our product prestige soya lecithin - poultry feed grade lecithin oil has been introduced after a continued and vigorous research work by our technical department. And within a short span of time it has established repute in the market and we are regularly supplying to major giants of the industry.

Main advantages of using poultry/aqua feed grade soya lecithin oil export quality-

1. It ensures excellent digestibility of fat and energy because it acts as a natural emulsifier

2. It improves the digestibility of the other nutrients in the feed and promotes the absorption of the fat-soluble vitamins
3. It has been specially developed for use in energy-rich feed mixtures for poultry
4. It is natural performance enhancement
5. Greater vitality
6. Support for the immune system
7. Efficient metabolism
8. Optimal supplies of choline and energy
9. Excellent binding of dust
10. It acts as energy supplies, energy concentrates, fat & protein enrichment
11. It helps as a physiological agent and aids in palletizing

Color

Light Brown to Yellow

Appearance

Semi-Liquid, viscous syrup

Odour

Predominately Soya

Taste

Characteristic of Soyabean

Specific Gravity

1.040 + 0.005 at 25o C

Moisture

0.8% to 1.5%

Acid Value(mgKOH/g)

25 to 35

Toulene Insoluble

0.5% to 1%

Acetone Insolubles

60% to 65%

Solubility

Insoluble in water and acetone

Hexane Insolubles

<0.3%

Energy Value

8,500 kcal/KG approx.

Food Grade

Analysis

Specification

Color (Gardner Scale)

Light Brown to Yellow 10-12 Max.

Physical Appearance

Viscous Semi-liquid

Odor

Predominately Soya

Taste

Characteristic of Soyabean

Moisture

1.00%

Acetone Insoluble

60-65%

Acid Value

30 mg KOH/gm Max.

Benzene Insoluble

0.3% Max.

Peroxide Value

< 5 meq/Kg

Viscosity at 25°C

150 Poise Max

Solubility

Insoluble in water and Acetone

Micro Biological Analysis

- Total page counts 3000 Max.
- Yeasts and Moulds 100 Max.
- Salmonella in 25 gm Absent
- E-Coli Absent
- Coliforms Absent

Industrial Grade Soya LecithinTypical Specification

Analysis	Specification
Colour	

Brownish

Physical Appearance

Semi-liquid

Odor

Predominately Soya

Taste

Characteristic of Soyabean

Moisture

1.0% Max.

Acetone Insoluble

55-65%

Benzene Insoluble

1.0% Max.

Acid Value

35 mg KOH/g Max.

Viscosity at 25 °C

80-150 Poise

Printing inks, paints & surface coatings

As emulsifying, wetting & dispersing agent

Leather

As Wetting and softening agent

Rubber

As accelerating, dispersing and softening agent

Resins and Plastics

As mould lubricant

Cosmetics and Soaps

As emulsifying agent, antioxidant and emollient

Petroleum Derivatives

As antioxidant & additive to lubricant, to prevent gum formation

Paper Manufacture

As defoaming agent

Alcohol & Yeast Manufacture

As antifoaming agent

Paint Grade Soya Lecithin Typical Specification
Parameters Specifications

- Acetone Insoluble 55 Min.
- Moisture 1 Max.
- Colour (Gardner Scale) 20 Max.
- Hexane Insoluble 1 Max.
- Acid value 30 Max.
- IV 80-90
- Phosphorus (as P 2 O 5) 5 Min.

Pharma Grade Soya LecithinTypical Specification

Chemical Analysis

Parameters

Unit

Specifications

Acetone Insoluble

%W/W

62 Min.

Moisture

%W/W

0.5 Max.

Colour (Gardner Scale) 5% (solution)

-

10 Max.

Hexane Insoluble

%W/W

0.5 Max.

Acid value

MgKoH/gm

30 Max.

Peroxide value

meq. / Kg

Nil

Viscosity @ 25 0 c(Brookfield,Spindle No.3,4 R.P.M 10-20)

Poise

120 Max.

Micro Biologogical Analysis

Total page counts

-

Nil

Yeasts and Moulds

-

Nil

Salmonella in 25 gm

-

Absent

E-Coli

-

Absent

Coliforms

-

Absent

Heavy Metals

Iron

PPM

30 Max.

Copper

PPM

10 Max.

Lead

PPM

10 Max.

Arsenic

-

Nil

Zinc

PPM

5 Max.

Soya Lecithin Lequid "Standard

Analytical Data

- Acid Value | Max.30mg Koh/G. | Is : 548(Part-1) 1964
- Peroxide Value | 5% Max | Is: 548(Part-1) 1964
- Acetone Ins. | 62% Min | Usp.Nf-18:P2259
- Toluene Insoluble | 0.3% Max | Usp.Nf-18method:(921)
- Hexane Ins. | 0.3% Max | Usp,Nf-18method:1(921)

80-200 Mesh.