<u>Luctoce</u> ™ Carboxymethyl Cellulose

Description

Luctocel™ is a Sodium salt of Carboxymethyl ether of cellulose, which is anionic in nature. **Luctocel™** can be used as thickener, binder, emulsifier, stabilizer and colloidal suspending agent in food & personal care systems and as a binder, thickener, stabilizer or film forming and tableting excipient in pharmaceutical systems.

Regulatory Information:

Luctocel™ meets standards set by the U.S. Code of Federal Regulations, Title 21, Part 182, Subpart B - Multiple purpose GRAS food substance under Section 182.1745.

- Food Chemical Codex- Food Status: Direct food additive.
- European Community- Food Status: E-466, ADI: Not specified.
- FAO/WHO Codex Alimentarius Commission- ADI: Not specified.
- CAS No. 9004-32-4
- Meets the requirements for pharmaceutical use by USP/NF, Ph. Eur., I.P. and most other pharmacopoeias

General Properties:

Luctocel™ is an anionic water –soluble polymer derived from cellulose has following properties:

- White or a slightly yellowish, almost odorless, tasteless and hygroscopic powder, consisting of fine to coarse particles.
- Soluble in water; viscosity increases exponentially with increasing concentration.
- Solutions exhibit non-Newtonian pseudoplastic behavior.
- Suitable for use in food systems.
- Acts as a thickener, binder, stabilizer, protective colloid, suspending agent and rheology control agent.
- It is physiologically inert.

Grades

Lucid Colloids Ltd. offers a variety of Luctocel™ grades, with varying degrees of substitution, viscosities and particle sizes.

Please do not hesitate to ask for additional information and samples of our broad product range.

Preparation of Solutions

A number of factors such as solvent, choice of polymer and shear rate affect dispersion and dissolution of **Luctocel**TM. **Luctocel**TM is readily soluble in cold and hot water. Rapid dissolution requires even dispersion of **Luctocel**TM particles in the aqueous medium. For that reason, intense agitation of the solution is necessary when introducing **Luctocel**TM. Insufficient dispersion will cause lumps. Pre-blending **Luctocel**TM with other dry ingredients or pre-suspending it in glycerine, ethanol, or propylene glycol facilitates the preparation of LuctocelTM solutions.

Packing:

This product is available in 25 Kg laminated paper bags as a moisture barrier.



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Storage:

Store product in a dry and cool place, away from heat and out of the sun. Once package is opened, consume within reasonable time. Store opened and unused packages after adequate re-sealing to avoid contamination and moisture ingress. Shelf life is 2 years from the date of manufacture.

Luctocel™ solutions, however, although more resistant to microbial attack than most other water soluble polymers, should be protected by adequate preservatives when storage time shall exceed 24 hours. **Luctocel™** is compatible with most commonly used preservatives.

Safety, Health, Environment and Handling:

See Material Safety Data Sheet.