Magnafloc® LT20 / LT25 / LT27 / LT27AG / LT30 / LT340 Flocculants

Description
High molecular weight polyacrylamide-based flocculants, which exhibit varying degrees of ionic charge. They are supplied as free flowing white powders.

Approved by a range of regulatory bodies (see regulatory table).

Chemical structure
Nonionic – Magnafloc LT20 – polyacrylamide
Anionic – Magnafloc LT25, LT27, LT27AG, LT30 and LT340 – co-polymers of acrylamide and sodium acrylate

Principal use
Polyelectrolytes used as a coagulant aid in the clarification and filtration of potable water, and for the conditioning of potable water sludges prior to thickening and dewatering.

Processing and clarification of sugar beet washings and raw cane and beet juice. Enables production of high brilliance juices and high-quality sugar.

Product	General Flocculation	Treatment of Potable Water	Sugar Processing
Magnafloc LT20	√	√	√
Magnafloc LT25	√	√	√
Magnafloc LT27	√	√	√
Magnafloc LT27AG	√	√*	√
Magnafloc LT30	√	√	√
Magnafloc LT340	√	√	√

** Not UK (Application subjected to appropriate registration)*

Benefits
- Reduced inorganic coagulant dosage
- Increased clarifier throughput
- Reduced sludge production
- Reduced overall treatment costs
- Increased sugar quality and yield

Treatment Dosing
The UK average and maximum doses for water treatment are set, in accordance with the approval granted by the Secretary for State for the Environment under Regulation 31(4)(a), at 0.25 mg/l and 0.5 mg/l.

The NSF maximum usage level is 1 mg/l.

For sugar applications, the additive identified in paragraph (a) (1) of the FDA 173.5 is used as a flocculant in the clarification of beet sugar juice and liquor or cane sugar juice and liquor or corn starch hydrolyzate in an amount not to exceed 5 parts per million by weight of the juice or 10 parts per million by weight of the liquor or the corn starch hydrolyzate.

Regulatory Approvals/Compliance

Product	NSF60	EN1407*	FDA 173.5	DWI
Magnafloc LT20	√	√	X	√
Magnafloc LT25	√	√	√	√
Magnafloc LT27	√	√	√	√
Magnafloc LT27AG	√	X	√	X
Magnafloc LT30	√	√	√	X
Magnafloc LT340	√	X	X	X

** polymer active ingredients comply with EN1407*

NSF National Sanitation Foundation
EN1407 European Standard – Treatment of water intended for human consumption
FDA Food and Drug Administration (please contact a sales representative for the applicable Federal Regulations)
DWI Drinking Water Inspectorate (UK)

Typical properties

Product	Bulk Density	pH of 1% solution	Free acrylamide	Molecular weight	Ionicity
Magnafloc LT20	Approx. 0.7 g/cm^3	Approx. 5.4	Less than 0.020 %	Medium	Nonionic
Magnafloc LT25	Approx. 0.7 g/cm^3	Approx. 7.3	Less than 0.020 %	Very High	Med Anionic
Magnafloc LT27	Approx. 0.7 g/cm^3	Approx. 7.3	Less than 0.020 %	Very High	High Anionic
Magnafloc LT27AG	Approx. 0.7 g/cm^3	Approx. 7.3	Less than 0.050 %	Ultra High	High Anionic
Magnafloc LT30	Approx. 0.7 g/cm^3	Approx. 7.3	Less than 0.020 %	Very High	Very High Anionic
Magnafloc LT340	Approx. 0.7 g/cm^3	Approx. 7.5	Less than 0.050 %	Very High	High Anionic

Storage and Handling

The shelf life of the product is min. 24 months from date of manufacturing if it is stored in its sealed original packaging within the temperature range of 5 to 25 °C in a dry place.

It is recommended that stock solutions at 0.25 – 0.5 % are prepared regularly and for maximum effect such solutions should be used within 5 days. Beyond this period some loss in efficiency of the product may occur.

Corrosion towards most standard materials of construction is very low. Stainless steel, fibreglass, polyethylene, polypropylene and rubberised surfaces are recommended. In some cases, aluminium surfaces can be adversely affected.

Very slippery when wet. Please refer to the SDS for methods of removing the polymer.

Technical Service

Account managers and field service technicians are available to give advice and assistance in the running of laboratory tests and machine trials to select the correct product and determine the best application conditions.

Packaging

This product is available in a variety of packaging sizes. Your Solenis representative will recommend the appropriate packaging for the application.

Important Information

Typical Properties: Refer to the Safety Data Sheet (SDS).

Regulatory Information: Refer to the SDS or contact your sales representative for any additional regulatory and environmental information.

Safety: Solenis maintains an SDS for all of its products. Use the health and safety information contained in the SDS to develop appropriate product handling procedures to protect your employees and customers.

Our SDS should be read and understood by all of your supervisory personnel and employees before using Solenis products in your facilities.

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