

Surelease®, aqueous ethylcellulose dispersion, is optimally and specifically designed for modified release and taste masking applications. Using ethylcellulose as the rate controlling polymer, Surelease brings technological advances with dependable, reproducible extended release profiles that are consistent from laboratory to pilot and production scale processes.

## KEY CHARACTERISTICS

- Aqueous dispersion
- Complete, optimally formulated system
- Easy to use and environmentally friendly
- Consistent and reproducible drug release profiles
- Regulatory acceptance in the United States, Europe and certain other regions.

## APPLICATIONS

### Bead & Particle Coating

Surelease is used primarily as a barrier membrane for developing extended release dosage forms. Drug release can be effectively controlled by applying Surelease coating onto bead and particulate substrates. Fluid-bed coating is the most commonly used technique for coating of small particles.

### Matrix Granulation

Surelease can be used as a binder in wet granulation applications for production of free flowing granules, which can subsequently be compressed into tablets to achieve an extended drug release profile.

### Taste Mask Coating

Ethylcellulose the rate controlling polymer in Surelease is water insoluble and provides highly effective taste masking properties for unpalatable actives.

### Nutritional Enteric Coating

Surelease is a key component in Nutrateric® aqueous enteric coating, designed for food and dietary supplements.

## GENERAL MANUFACTURING PROCESS DESCRIPTION

Ethylcellulose is blended with plasticizer, then extruded and melted. The molten plasticized ethylcellulose is then directly emulsified in ammoniated water in a high shear mixing device under pressure. Ammonium oleate

is formed in-situ to stabilize and form the dispersion of plasticized ethylcellulose particles. Additional purified water is then added to achieve the final solids content. (Reference: U.S Patents 4,123,403 and 4,502,888).

## STABILITY

Surelease provides dependable modified release dissolution performance throughout its shelf life period. Some degradation of the plasticizer may occur during the manufacturing process. Colorcon can provide detailed stability reports, upon request.

## PACKAGING

Surelease is supplied as 25% w/w dispersion in tightly sealed polyethylene containers. Surelease is available in multiples of 18.0kg weights.

## SHELF LIFE

Surelease has a shelf life of 18 months, from date of manufacture when properly stored.

Grade	Shelf Life
E-7-19020	18 months
E-7-19030	18 months
E-7-19040	18 months

## RECOMMENDED STORAGE CONDITIONS

Store in tightly sealed containers. Avoid exposure to high humidity and temperatures above 30°C (86°F).

## Keep from Freezing

For more information, contact your Colorcon representative or call:

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