Kollicoat® Smartseal 30 D – Active Protection

Breaking new ground in taste masking and moisture protection

Thorsten Cech, an enabler in excipients
Smart protection from unpleasant taste
Effective sealing against moisture
Fast release of active ingredients
Easy and economical film coating
The first aqueous dispersion of a protective polymer

“Kollicoat® Smartseal 30 D combines a strong protective effect with efficient processing” ...

… says Thorsten Cech, an expert in BASF coatings. He and his colleagues are confident that the new polymer will help customers tackle challenges in formulating bitter or moisture-sensitive active ingredients. Kollicoat Smartseal 30 D offers superior protection for tablet, pellet and particle formulations – even in a very thin film. This helps pharmaceutical companies streamline and accelerate film coating.

The best of both worlds

Bitter and moisture-sensitive active ingredients can pose quite a challenge to formulators - but not anymore. Either of the two desired effects, concealing unpleasant tastes and creating a moisture barrier, can be achieved with one functional film-forming polymer. Kollicoat Smartseal 30 D is highly impermeable to water vapor, helping preserve the potency of sensitive active ingredients. What’s more, the polymer is highly stable in saliva and specifically soluble in gastric juice. This ensures effective protection from unpleasant tastes in the patient’s mouth and rapid release and onset of action of active ingredients in the stomach.

An aqueous polymer dispersion, Kollicoat Smartseal 30 D is easy to handle, and convenient to apply. And since it can be used in highly concentrated coating suspensions and at high spray rates, you benefit from reduced process times – and significant cost savings.
Chemical structure

Kollicoat Smartseal 30 D is an aqueous dispersion of a co-polymer comprising methyl methacrylate (MMA) and diethylaminoethyl methacrylate (DEAEMA). It also contains macrogol cetostearylether and sodium lauryl sulfate as stabilizers.

Immediate release of active ingredients in the stomach

Results from dissolution tests demonstrate resistance in neutral saliva and rapid release of the active ingredient in the acidic environment of the stomach.
**Smart protection from unpleasant taste**

Kollicoat Smartseal 30 D hides bitter taste with a significantly reduced coating thickness. For example, it masks the taste of quinine hydrochloride tablets more effectively than other leading protective coatings.

**Effective sealing against moisture**

Film coatings with a low water vapor permeability can delay the moisture uptake of sensitive cores. Tests on isolated films show that Kollicoat Smartseal 30 D has a lower water vapor permeability than other leading protective coatings.
With access to over 10,000 research and development employees worldwide and its dedication to creating innovative excipients, BASF has been adding value to pharmaceutical products for many decades.

Every day, BASF technical experts and regulatory teams across the globe help pharma customers master formulation and compliance challenges, and to be more successful.