

Nouryon

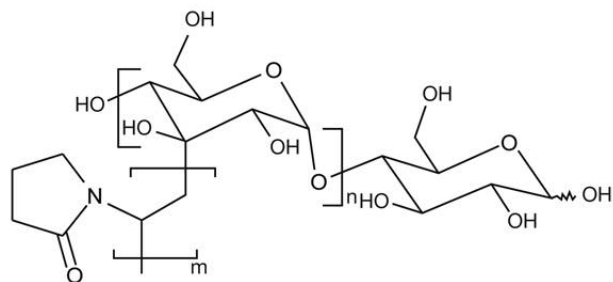
Adsee™ ST4

A new solution for seed treatment

Adsee ST4 is a unique starch-based polymer that represents a new way for formulators to create more natural and sustainable seed treatment products without sacrificing performance properties or cost targets.

Key benefits

- An innovative, nonionic hybrid technology combining maltodextrin and vinylpyrrolidone
- Contains greater than 50 percent renewable content
- High binding capacity for FS formulation to the seeds
- Effectively reduce dust-off from coated seeds
- No negative impact on flowability or germination



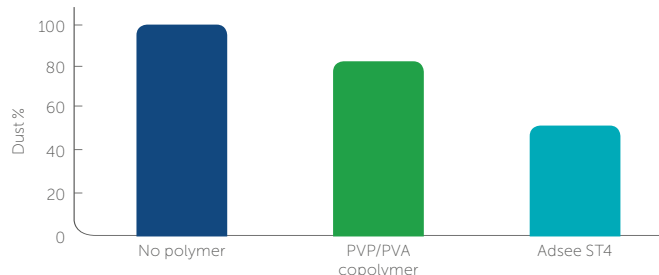
Handling and use recommendations

- Low viscosity and easy to handle
- Can be incorporated in complex seed treatment formulations or used in on-farm treatment dilution water
- Recommended dosage is 2-4 w/w-% in FS
- In dilution water the recommended amount of Adsee ST4 is 2-4w/w-% of the amount of FS that is used in the seed treatment
- Regulatory:
 - EPA approved
 - A polymer and exempt from REACH registration

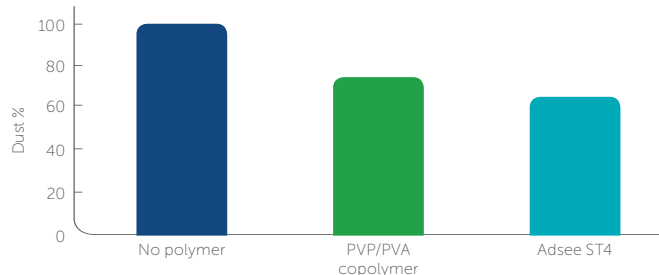
Effectively reducing dust-off from coated seeds

Adsee ST4 is compared to benchmark seed treatment polymers at 1% active content.

Flutriafol on oat



Imidacloprid on corn



Guide recipe

Imidacloprid 600

600 g/l Imidacloprid 600
27 g/l Morwet D-425
12 g/l Ethylan NS-500LQ
44 g/l Adsee ST4
2.2 g/l Antifoam emulsion

Flowability

Seeds coated with Imidacloprid

	No polymer	4% Adsee ST4
Corn	16.0 sec	14.2 sec
Oat	10.4 sec	8.4 sec
Soybean	8.0 sec	8.0 sec

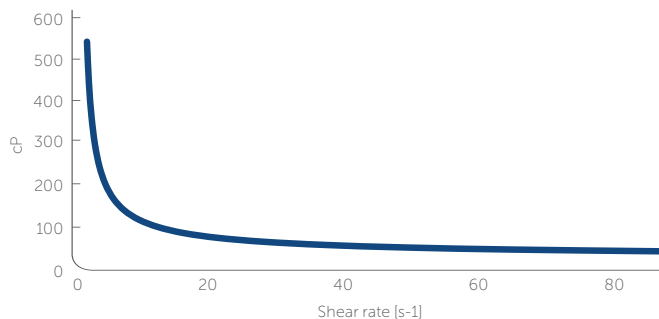
Flowability was tested by measuring the time required for a fixed amount of seeds flowing through a funnel. Adsee ST4 does not reduce flowability.



In-can compatability

Adsee ST4 is easy to incorporate into the FS formulation with low impact on rheology. The viscosity graph below shows the shear thinning behavior when 8% Adsee ST4 was added in 600 g/L Imidacloprid FS.

8% Adsee ST4 in 600 g/L Imidacloprid FS



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Nouryon

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