

AMINE-FREE ANTISTAT FOR POLYPROPYLENE



Your daily challenge

Efficient antistat performance in polypropylene

Elimination of ethoxylated amines

Need for global food contact approval

Unquestionably safe food packaging with GRINDSTED® AR 100

Demands for unquestioned safe chemistry in food packaging are steadily growing. As brand owners strive to improve every aspect of product safety, there is today a widespread desire to avoid ethoxylated amine chemistry wherever possible.

New GRINDSTED® AR 100 is a high-performing 1:1 alternative to conventional amine antistat solutions. GRINDSTED® AR 100 is not subject to dosing restrictions, but can be used at the loading level necessary to obtain the optimal, desired performance.

An unquestioned safety profile and worldwide approval in food contact applications make GRINDSTED® AR 100 an obvious choice.

The powder format ensures easy handling and feeding, along with good heat and process stability – an added benefit during processing and conversion.

Your gains and benefits

| Your business gains | Your product benefits | Our proven solution |
|--|--|---------------------|
| Unquestioned safety in food packaging Improved brand protection | Excellent antistat performance Ethoxylated amine-free antistat Global approval Powdered product with good dosing and handling characteristics | GRINDSTED® AR 100 |

Performance

GRINDSTED® AR 100 is an efficient, all-in-one alternative to amine antistats. It ensures excellent antistat performance and high clarity across a wide range of PP film applications. Extensive testing has proven the performance of GRINDSTED® AR 100.

BOPP and cast PP film are target applications for GRINDSTED® AR 100. The example is a 3-layer 20 µm BOPP film with antistat added in

the 2 µm skin layer. Antistat efficiency compares extremely well with a conventional amine antistat solution and also shows no adverse effect on visual properties; haze and gloss values are not affected.

The safety, product properties and efficiency of GRINDSTED® AR 100 makes it an ideal solution for PP packaging.

BOPP film. A 20 µm 3-layer construction with 16 µm homopolymer core and 2 x 2 µm skin layers

| Additive | Conc. % | Corona treated | Static decay time, sec. | | | | | | Haze | Gloss |
|---------------------|---------|----------------|-------------------------|--------|--------|--------|---------|-----------|---------|---------|
| | | | Week 2 | Week 3 | Week 4 | Week 8 | Week 16 | Week 32 | Week 16 | Week 16 |
| GRINDSTED® AR 100 | 0.15 | Yes | 0.39 | 0.45 | 0.31 | 0.32 | 0.29 | 0.39 | 1.11 | 89 |
| | | No | 0.48 | 0.83 | 0.35 | 0.32 | 0.53 | 0.95 | 0.85 | 91 |
| Amine and GMS blend | 0.15 | Yes | 0.04 | 0.28 | 0.33 | 0.06 | 0.28 | 0.20 | 1.04 | 90 |
| | | No | 2.74 | 3.21 | 2.86 | 0.03 | 1.37 | No effect | 1.11 | 89 |

Other DuPont additives for polyolefin film packaging

GRINDSTED® PGE 909 for cold fog PP applications

GRINDSTED® PS 426 for hot fog PP applications

GRINDSTED® PGE 308 for antistat and antifog PE applications

GRINDSTED® PGE O 80 for antifog PE applications

ASK US FOR

Free sample - Formulation - Technical assistance

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