ACTEGA Kelstar Technical Bulletin
MOD Technology

MOD (Micro Optical Disruption) is ACTEGA Kelstar's trade name for a new and highly proprietary line of satin and matte coatings technology. Traditional aqueous satin and matte coatings are made by adding very fine silica solids into gloss polymers. The silicas that are used to lower refraction cause other issues such as burnishing, poor run resistance and settling. One of the biggest drawbacks is reduced flow and leveling which contributes to visual defects such as a rough visual effect and uneven lay on jobs printed with high density, dark colored inks. As the gloss levels of traditional satin and matte coatings drop, the solids content rises which tends to further emphasize uneven coating lay. Generally, the higher the solids, the worse the transfer, flow and leveling which leads to more visual defects and irregular surface smoothness.

ACTEGA Kelstar's MOD technology employs a novel method for variable gloss reduction without altering the polymer characteristics of the coating. The rheological properties do not change as a function of gloss level reduction.

Features & Benefits

1. **Reduced curl** resulting from greater polymer flexibility and lower shrinkage when drying.
2. Considerably **higher block resistance** of 180ºF to provide greater print and coating latitude.
3. These coatings are **anilox ready** because the high levels of surfactants are not required resulting in a superiod viscosity profile with non-thixotropic behavior.
4. MOD technology with modified solids produces a unique surface feel that is **very smooth**. The combination on smooth lay and feel is tactile and appealing to print buyers.
5. This system rewets itself easily and has excellent runnability and machinability. Dried coating on the blanket is quickly dissolved when the press starts, thus reducing ink back trapping and blanket cleaning.
6. The use of MOD technology provides **superior film clarity** because the coating does not become more opaque as solids are added and is much less apt to color shift the shade of inks.
7. Excellent non-settling characteristics providing satin and matte coatings with much better gloss control and consistency throughout the run.
8. Offered in various formulas with gloss levels from 10º to 50º when measured with a 60º gloss meter.

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MOD Satin & Matte Gloss Guide

Product	Gloss Reading
Starkote AQ-3010 Matte	10º
Starkote AQ-3018 Matte	20º
Starkote AQ-3020 Matte	20º
Starkote AQ-3024 Satin	25º
Starkote AQ-3025 Satin	25º
Starkote AQ-3030 Satin	30º
Starkote AQ-3035 Satin	35º
Starkote AQ-3040 Satin	40º
Starkote AQ-3042 Satin	40º

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