

EASTMAN

Eastman Solus™
family of performance additives

Driving compliance and performance

American Coatings Show 2010

Recognized . . . for corporate responsibility



Uptime
Institute™
2009 Global Green 100



Technology trends guide development work

EASTMAN



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graph LR; EASTMAN[EASTMAN] --> HS[High solids coatings]; EASTMAN --> WC[Waterborne coatings]; EASTMAN --> CI[Compact / Integrated processes];
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High solids coatings

Improve productivity and appearance at increased solids

Waterborne coatings

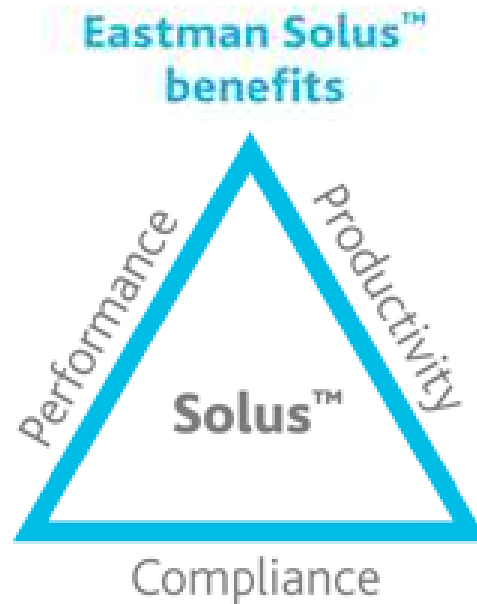
Improve application robustness over varying temperature and humidity while minimizing defects and enhancing appearance

Compact / Integrated processes

Improve flow and leveling, minimize mixing at interfaces, overcome variability in substrate quality and roughness

Eastman's multifaceted approach

- State-of-the-art spray booth facility
- Team of coating experts – design, development and application
- Products designed for tomorrow's needs



Eastman Solus™ performance additives increase the sustainability content of your formulations

Solus products like traditional cellulose esters contain up to 60% cellulose, the most abundant naturally occurring bio-polymer



This polysaccharide represents a readily available, sustainable feedstock alternative to petroleum-based materials

Eastman Solus™ performance additives

....driving compliance and performance....

The Solus™ 2000 series

....Driving performance in high solids systems....

- CAB-like performance for compliant solvent based systems

The Solus™ 3000 Series

....Driving performance in waterborne systems....

- In development to bring CAB-like performance to water-based coatings

Eastman Solus™ 2000 series – family of products

| Typical physical properties of Solus™ products | | |
|--|---|---|
| | Solus™ 2100 | Solus™ 2300 |
| Appearance | Free-flowing white powder | |
| Solids | 100% | |
| Tg | 75°C | 110°C |
| % OH | 1.5 | 1.5 |
| Butyryl level | High | Low |
| Density, cast film kg/l (lb/gal) | 1.18 (9.89) | 1.23 (10.3) |
| <u>Applications Guide:</u> | <ul style="list-style-type: none"> •Auto – clearcoats •Industrial – HS topcoats with alkyds or PU •UV cured systems •Wood – compatible with 2K-PU industrial finishes | <ul style="list-style-type: none"> •Auto – basecoats / primers •Industrial – HS topcoats, limited to PU systems |



Developing solutions for high solids SB systems

Eastman has commercialized high solids cellulosic materials...

Solus 2300 – High Solids Basecoats (up to ~ 50% solids)

- Improves productivity through increased solids
- Improves flake control and brightness
- Minimizes surface roughness
- Increases redissolve resistance in multilayer systems

Solus 2100 – Automotive Clearcoat applications (up to 60% solids)

- Reduces dry-to-touch time
- Improves anti-sag
- Aids in flow and leveling
- Improves polishability in refinish systems

Eastman Solus™ performance additives

....driving performance and compliance....

- Literature available for Solus™ 2300:
 - Publication M-562 – *Eastman Solus™ 2300 Performance Additive – Enabling Higher Solids While Optimizing Appearance*
 - Publication M-563 – *Eastman Solus™ 2300 Performance Additive – Improved Performance in Industrial Coatings*
- [Eastman Solus™ 2300 performance additive web site](#)
- [Eastman Solus™ performance additives product line overview](#)

What else is new for the Eastman Solus™ family of performance additives?

- Commercialization of DPA 3050 to occur fall of 2010
 - Targeted for WB applications with traditional CAB-like performance.
- Introduction of 4 new DPAs from the Solus™ 2000 series
 - DPA 2101 and 2102 – similar applications as Solus™ 2100
 - DPA 2301 and 2302 – similar applications as Solus™ 2300

DPA – Developmental Performance Additive

Thank you.

**Stop and learn more at Eastman Chemical's
booth #1111**