



BULLETIN VC-583F (Supersedes VC-583E)

Admiral™ fluidized polymer suspensions

Storage, Transfer, and Metering

Admiral high-solids, fluidized polymer suspensions are used as water-retention aids and rheology modifiers for paper coatings. They are pourable, pumpable liquids that are produced in drum, bulk-bin, and tank-truck quantities. Currently available in two distinct grades — FS and PB — these Admiral products can be integrated into new or existing coating operations using the guidelines below.

Storage

All Admiral fluidized polymer suspension products can be stored in stainless steel, fiberglass-reinforced plastic (FRP), epoxy-lined, or tile tanks. Unlined carbon steel or cement block tanks are not recommended.

Storage tanks, bulk bins, or drums of Admiral fluidized polymer suspension FS and PB grades do not require agitation prior to use, unless the material is left standing for two months or more.

Admiral fluidized polymer suspension products should be stored at 50-90°F (10-35°C). Outside of this range, changes in the products' viscosity will occur that could alter the metered flow rates.

All Admiral fluidized polymer suspension products are freeze-thaw stable. Should they become frozen, warm to 50-90°F (10-35°C) and thoroughly remix before using.

Transfer

Admiral fluidized polymer suspensions, FS and PB grades, can be transferred from tank truck to storage tank, storage tank to run tank, or between any two containers using the following transfer devices: air diaphragm pump, air pad, or Moyno* progressive cavity pump.

<u>Admiral Type</u>	<u>Air Diaphragm Pump</u>	<u>Pad</u>	<u>Air</u>	<u>Progressive Cavity Pump, Moyno*</u>
FS	X	X		X
PB	X	X		X

*Trademark of Robbins & Myers, Inc.

Note the following cautionary statements:

1. Centrifugal pumps are not recommended.
2. Since Admiral™ fluidized polymer suspension products are designed to thicken in the presence of water, only mechanical seals should be used; a broken water seal would have very adverse effects.
3. Pump heads should be constructed of stainless steel or Hastelloy* C nickel-base, heat- and corrosion-resistant alloy. Piping construction can be of stainless steel, polyvinyl chloride (PVC), or FRP. Galvanized steel, copper, brass, or carbon steel should not be used.

Metering

The following metering pumps⁽¹⁾ and flow measurement systems are recommended for Admiral fluidized polymer suspension products.

<u>Admiral Type</u>	<u>Progressive Cavity Pump</u>	<u>Mass Flow Meter</u>	<u>Magnetic Flow Meter</u>
FS	X	X	X
PB	X	X	X

Handling and Cleanup

Admiral fluidized polymer suspension products are designed to thicken in the presence of water. Care must be taken to avoid contamination of Admiral products with water prior to their storage or delivery into the pigmented or nonpigmented coating. Therefore:

- All tank truck unloading and transfer lines should be blown clear with clean, dry, mill air only; no water flush is to be used.
- Spills should be diked and shoveled into proper containers for landfill disposal. Any remaining material should be allowed to dry, then swept up with a broom and dustpan. A waterhose should be used only as a last resort, and then copious amounts of water should be employed.

Product Safety

Read and understand the Safety Data Sheets (SDSs) before using these products. Normal safety precautions such as the use of goggles, a face shield, and rubber gloves are appropriate when in direct contact with the product, such as in spill containment or cleanup operations.

Contact your local representative for assistance with handling concerns or design considerations in the use of Admiral fluidized polymer suspension products.

*Trademark of Stellite Rod Div., Stoodly Deloro Stellite, Inc.

⁽¹⁾Use pumps with mechanical seals only.

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