



P-FFA

TECHNICAL DATA SHEET

DATE: JANUARY 1, 2026

PETROCHEM – FREE FLOW ADDITIVE (POWDER)

PRODUCT DESCRIPTION

P-FFA is a solid free-flow additive designed to reduce static charge, particle agglomeration, and material handling losses in dry cement and other bulk solid systems. P-FFA improves dry material flow characteristics, promotes uniform solids movement, reduces transfer losses, and supports efficient and consistent loading, transfer, and delivery operations.

APPLICATIONS

- Flow enhancement for dry cement and bulk materials
- Pneumatic transfer systems for cement, proppants, and minerals
- Bulk material loading, transfer, and offloading operations
- Applications requiring reduced material loss, improved flow consistency, and more efficient solids handling

TECHNICAL DATA

- Reduces and/or eliminates static charge buildup during dry material transfer
- Minimizes particle agglomeration and associated air entrainment
- Improves bulk material flow characteristics and reduces surging during transfer
- Enhances transfer efficiency and helps reduce material losses
- Improves handling performance under varying temperature, humidity, and operating conditions
- Effective in systems with low angles of repose, including horizontal and marine storage tanks
- Compatible with cement systems and commonly used cement additives
- High-viscosity systems should be laboratory tested to confirm slurry performance and compatibility prior to field application

TYPICAL PROPERTIES

- Appearance: White Powder
- Specific Gravity: ~2.61
- Typical Application Temperature: Up to 400°F (204°C)

RECOMMENDED TREATMENT

- Typical dosage: ~0.10 - 0.25% BWOC
- Add P-FFA to the base cement and blend for approximately 2 minutes prior to the addition of other additives
- Complete blending with the full cement load for approximately 15 minutes to promote uniform product distribution
- Final dosage and blending procedure should be confirmed through laboratory testing and field evaluation for the specific cement system and operating conditions

APPLICATION MECHANISM

- Interacts with charged particle surfaces to promote repulsive forces within the dry blend
- Reduces inter-particle attraction associated with poor flow characteristics, particle agglomeration, and inconsistent solids movement
- Improves bulk flow behavior, reduces transfer losses, and enhances overall material transfer efficiency
- Field results indicate reductions in material loss from approximately 30–60% to less than 10% in problematic systems



PROPPANT APPLICATION

- Recommended dosage: ~0.10 - 0.25% by weight (≈100-250 lbs per 100,000 lb proppant)
- Can be introduced at the air can prior to transfer or incorporated during manufacturing
- Improves pneumatic flow characteristics and reduces surging during transfer
- Promotes smoother material movement and improved density control
- No known compatibility issues with standard proppant systems

SLURRY PERFORMANCE

- Improves cement blend flow characteristics prior to hydration
- Contributes to improved density control during slurry preparation
- Does not adversely affect cement system compatibility when properly evaluated through laboratory testing

PACKAGING

- Packaged in 40 × 50 lb (22.7 kg) sacks per pallet

SAFETY

- Refer to the Safety Data Sheet (SDS) prior to handling or use

NOTICE

The information provided herein is offered in good faith; however, no warranties, express or implied, are made. Users are responsible for determining product suitability and performance under actual operating conditions.