



Clean Up / Innovative Technology
Technical Bulletin

Absorbent Protected with mPale™ Antimicrobial

Subject: Loose absorbents for biohazard spills

Present Options:

- 1) Poly acrylates: White “water only” powder that absorbs a tremendous amount of liquid for its weight. At issue is cost (up to \$2.00 per ounce volumetric), no oil or mingled solids capability, leaves behind a waxy slippery film, and is easily windblown with static cling. This product is normally used for small liquid lab spills and is of little value for large vomitus or diarrhea accidents.
- 2) Saw dust / natural fibers and clay: Low cost and collects both oil and water. Functions by use of *adsorbing* properties (contaminate clings to outside *with minimal* absorption capabilities (inside the material). Wets out easily which leaves behind a mess and fibrous materials readily become windblown. Infiltration of pests is possible. For disposal these products are usually considered leaching (captured contaminants can be removed to ground water if landfilled).
- 3) Mineral / volcanic ash: Excellent oil and water absorption and reasonably priced. Very light weight, static cling, and easily windblown. Considered to offer features and benefits that goes beyond other absorption choices. Downside is 1 gallon of product weighs less than 1 pound and users sometime have issues with recovery.

All of the above options can have fragrance or powdered ingredients added to enhance benefits. Liquid wetting of fiber, clay, or ash is possible. Fragrance, odor counteractants or antimicrobials can be added during the manufacturing process but *is limited to approximately 2% liquid volume* on the absorbent. This equates to 2 to 3 ounces liquid active ingredients sprayed onto 1 gallon (128 ounces) of absorbent.

Clean Up Innovative Technology – A New Alternative

- Mineral / expanded volcanic ash: Proprietary *expanded mineral process* allows an incredible amount of liquid loading. Instead of an applied 2% liquid volume limit; Clean Up is applied with up to a **33%** liquid volume limit. This translates to an amazing 42 ounces of liquid active ingredients inside 1 gallon of Clean Up absorbent powder!
- Product weight is increased over 350% and the mineral is no longer static cling or easily windblown. Excellent oil and water absorption.
- Heavy liquid loading of active ingredients offers additional features and benefits along with an enhanced value proposition. See PRODUCT INFORMATION and VALUE PROPOSITION SHEET.

