

Benefits of Solid Detergent Technology

Until the 1970s, powder detergents were the accepted standard. The 70s brought liquid detergents to the forefront. They were easier to use, could be diluted on sight, and quickly outdated powders, but not without a price. The Solid Revolution, the introduction of solid detergent chemistry, addresses all of the negative attributes of powder and liquid detergents.

As this chart shows, all of the disadvantages of powders and liquids are resolved by solid detergent.

Advantages of Solids

- Can be up to 100% active
- Long storage stability
- Freeze/thaw stability
- High percentage of ionic components, water conditioners, alkalinity
- Many combinations possible without interactions
- Can incorporate bleaches or enzymes
- Excellent dispensing
- Will not segregate
- Cost effective product formulation
- Controlled dispensing
- Many surfactant choices
- Neat, clean, nonhazardous, can't spill
- No unnecessary couplers, fillers
- No viscosity variation with temperature
- Fewer service calls
- Low shipping cost

Advantages of Liquids

- Controlled dispensing
- Immediate solubility
- Cheaper raw materials
- Many surfactant choices
- Available in bulk for large volume users
- Easy to manufacture

Disadvantages of Liquids

- Maximum concentration 45 percent
- Requires coupling agents which add cost
- Requires viscosity modifier
- Viscosity and dispenser delivery vary with temperature
- Freeze/thaw stability problems
- Storage stability
- Lower possible water conditioning
- Spills—corrosion, dangerous mixtures
- Precipitation plugs lines
- High shipping cost
- Service of dispensers—tubes maintenance, metering tips, etc

Advantages of Powders

- Can be up to 100% active
- Long storage stability
- Freeze/thaw stability
- High percentage of ionic components, water conditioners, alkalinity
- Many combinations possible without interactions
- Can incorporate bleaches or enzymes

Disadvantages of Powders

- Difficult to dispense
- Cakes on storage
- Slow to dissolve in use solution
- Messy, dusty, hazardous
- Can't use aqueous surfactants
- Segregation