

# Waste Lock® 770

**Waste Lock® 770** is a solid, granular Superabsorbent Polymer. This cross-linked polyacrylate material swells and absorbs many times its weight in aqueous solutions. **Waste Lock® 770** has been engineered to absorb under pressure and has properties that make it ideally suited for the absorption and solidification of low level radioactive waste (LLRW) and other types of waste sludges.

## **Product Attributes:**

- ✓ **Reduces Waste Disposal Costs** – Expands in Volume by Less Than 1%.
- ✓ Non-Biodegradable Polymer (40 CFR 264.314 (e)(ii))
- ✓ Polycarboxylate Polymer Will Not Release Trapped Ionic Contaminants If Solute Evaporation Occurs.
- ✓ Strong Ion Exchange Capability Allows For Heavy Metal Binding And For Many Solidified Wastes To Pass TCLP.
- ✓ When Used Properly, Waste Sludges Will Pass Paint Filter Test (EPA 9095).
- ✓ Polymer is Duratek Approved for Incineration.
- ✓ Freeze-Thaw Tested. The Polymer Will Not Release Free Liquids.
- ✓ Polymer Will Excellently Absorb Aqueous Wastes of pH > 4. For Highly Acidic Wastes, Neutralization (pH Adjustment) Is Recommended.
- ✓ **Approved Sorbent at Hanford (WA) Reservation.**

### **Typical Absorptive Properties:**

Free Swell in DI Water	400 - 500 X
Free Swell in 1 % NaCl	45 - 55 X
Free Swell in 2 % NaCl	35 - 40 X
Free Swell in 10 % NaCl	19 - 25 X
Free Swell in 1 % CaCl <sub>2</sub>	20 - 25 X
Free Swell in 8N NaOH	24 - 30 X

### **Liquid Release Test (EPA 9096):**

**Waste Lock® 770** has the ability to both absorb under pressure and to retain absorbed liquids at high pressures:

At 25X Hydration, PASSES at 50 psi

At 10X Hydration, PASSES at 75 psi

## **For Samples & Information Contact:**



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