

AquaSorb Q-S is a cross-linked polyacrylate Advanced Superabsorbent granular Polymer that rapidly absorbs and retains large volumes of aqueous solutions. The absorptive properties of AquaSorb Q-S are ideally suited for the absorption and solidification of hazardous and non-hazardous waste waters, soils, and semi-solid matter. This high efficiency absorbent is capable of absorbing up to 250 times by weight of aqueous matter and reduces waste disposal costs by maximizing volume expansion less than 1%.

Applications:

AquaSorb Q-S is specially formulated for use in the following applications:

- Solidification of dredge soils, wet soils and other semi-solid matter
- High efficient solidification agent for Low Level Waste (LLW) and other hazardous wastes
- Moisture and free liquid control

Product features:

- Reduces Waste Disposal Costs – expands in volume by less than 1%
- Non-Biodegradable Polymer (per 40 CFR 264.314 (e)(ii)).
- Freeze-Thaw Tested: will not release liquids after freezing and subsequent heating to 160° F
- Not release trapped Ionic contaminants if solute evaporation occurs.
- Passes Paint Filter Test (EPA 9095).
- Approved for use at Hanford and other licensed facilities
- SEG Certified Incinerable Material with a heat value of 5560 BTU/lbs.
- Strong Ion exchange capability allows for heavy metals to be bound and wastes to pass TCLP.

Typical Absorptive Properties:

Free Swell in D.I. Water	250-350 X
In 1% AlCl ₃	22-26 X
Free Swell in 1% NaCl	43-52 X
In 6N NaOH	23-29 X
Free Swell in 2% NaCl	34-41 X
In 8N NaOH	22-28 X
Free Swell in 10% NaCl	19-23 X
In 6N NaOH + 2% NaCl	22-28 X
Free Swell in 1% CaCl ₂	20-24 X
In 10% Bleach + 1% NaCl	39-47 X

Liquid Release Test (EPA 9096)

(Deionized Water Retention After 10 Minutes)
 Passes with 25 x weight at 20 psi
 Passes with 15 x weight at 50 psi





Cost Effective stabilization of Nuclear Wastewater Liquid Waste Streams (LLRW)

AQUASORB Q-S LAMINATE SHEETS—FOR NUCLEAR WASTEWATER

AquaSorb Q-S Absorbent Sheets are a higher performing, yet lower cost alternative to other absorbent fabric products that are used in the hazardous waste or nuclear waste disposal industry.

AquaSorb Q-S Absorbent Sheets are made with polyester fabric layers bonded together with a special polyolefin adhesive. The AquaSorb Q-S granular absorbent polymer is imbedded between the layers of fabric and the entire laminate structure is made of non-biodegradable materials.

Product features:

- **AquaSorb Q-S® Absorbent Sheets** absorb and retain up to 145 times their own weight in aqueous liquids.
- **AquaSorb Q-S® Absorbent Sheets** are about 1/3 the thickness of conventional absorbent fabrics that are used in the nuclear remediation industry (0.04 cm vs. 0.11 cm). They take up less volume in a container and yet still deliver superior absorbency. Freeze-Thaw Tested: will not release liquids after freezing and subsequent heating to 160° F
- All materials are non-biodegradable.
- **AquaSorb Q-S® Absorbent Sheets** absorb and retain large volumes of condensate and free aqueous liquids in radwaste and hazardous waste containers. Helps to retard the corrosion of metal containers.
- **AquaSorb Q-S®** Granular absorbent polymer is approved for use at several DOD and DOE facilities.

AquaSorb Q-S® Products

NSN	Part #	Description
4235-01-459-1787	QSG-RP	Rectangle Pads for B-25 boxes (46"x72") 25/box
4235-01-459-1783	QSG-CP	Circular Drum pads (22" diameter), 150/box
4235-01-459-1796	QSG-ROLL	Sheet Material (4'x500' rolls)
4235-01-459-1794	QSG-DSK	4 Circular Pads, & 10 lbs. Granular Absorbent
4235-01-459-1836	QSG-DRUM	55 Gallon drum of granular absorbent,
4235-01-459-1839	QSG-500	500 lb. Super Sack of granular absorbent
4235-01-459-1843	QSG-1825	1825 lb. Super sack of granular absorbent
4235-01-459-1845	QSG-44	44 lb. Bag of granular absorbent (NOW 50#'s)
4235-01-459-1847	QSG-PAIL	30 LB. Pail of granular absorbent

