

VENDOR CATALOG / PEABODY ENGINEERING

Peabody Engineering Catalog

ProChem® single-wall and Gemini® dual-containment polyethylene tanks – with a real per-chemical material/venting/containment guidance table across 6 named chemistries.

SPECIAL APPLICATION CHEMICAL GUIDANCE

Per-Chemical Material, Venting & Containment

Linear PE has wider chemical resistance than XLPE and is Peabody's specific recommendation for all 4 oxidizer chemistries below — Peabody does NOT recommend cross-linked (XLPE) tanks with a linear liner for these.

Chemical	Max Conc.	Notable
Sulfuric Acid	up to 98%	CPVC/PVDF/316SS required above 70%; not recommended above 100°F
Sodium Hypochlorite	12.5%	Both EPDM and Viton elastomers in active use
Hydrochloric Acid	up to 37%	Noxious fumes require venting to a scrubbing system
Hydrogen Peroxide	up to 50%	Welded PE fittings preferred over flanged/coupling connections
Sodium/Potassium Hydroxide	—	EPDM compatible; Viton AND PVDF both NOT recommended
Chlorine Dioxide	—	HDLPE or PVDF tanks; vented to a scrubbing system

TANK FAMILIES

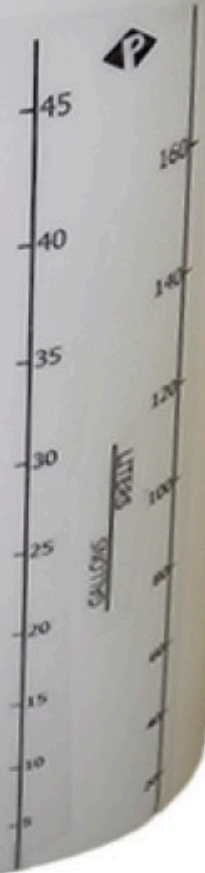
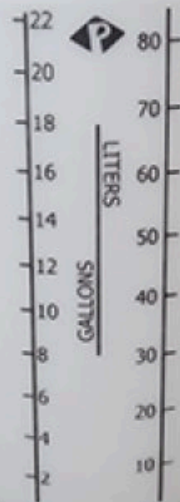
ProChem® Single Wall · Gemini® Dual Containment

"Standard Linear polyethylene (LPE) or Crosslink polyethylene (XLPE) construction provides superior chemical resistance for acids, caustics, sodium hypochlorite, biocides, etc. — handles aggressive applications that stainless steel will not."

Family	Size Range	Notable
ProChem Chemical & Agricultural Tanks	25–10,000 gal	NSF/ANSI/CAN-61 certified, LPE/XLPE/PVDF options
Gemini Cylindrical	15–1,500 gal	Tank-in-a-tank, integral pump mounting platform rated to 240 lbs
Gemini ² MCU	3 configs, 6–12 gal chambers	Built for biocide/inhibitor dosing in limited space, optional overhead PumpDeck
PailVault™	5-gallon pail containment	400% secondary containment, PLUS variant has split lid for pump swap without unmounting



320
280
240

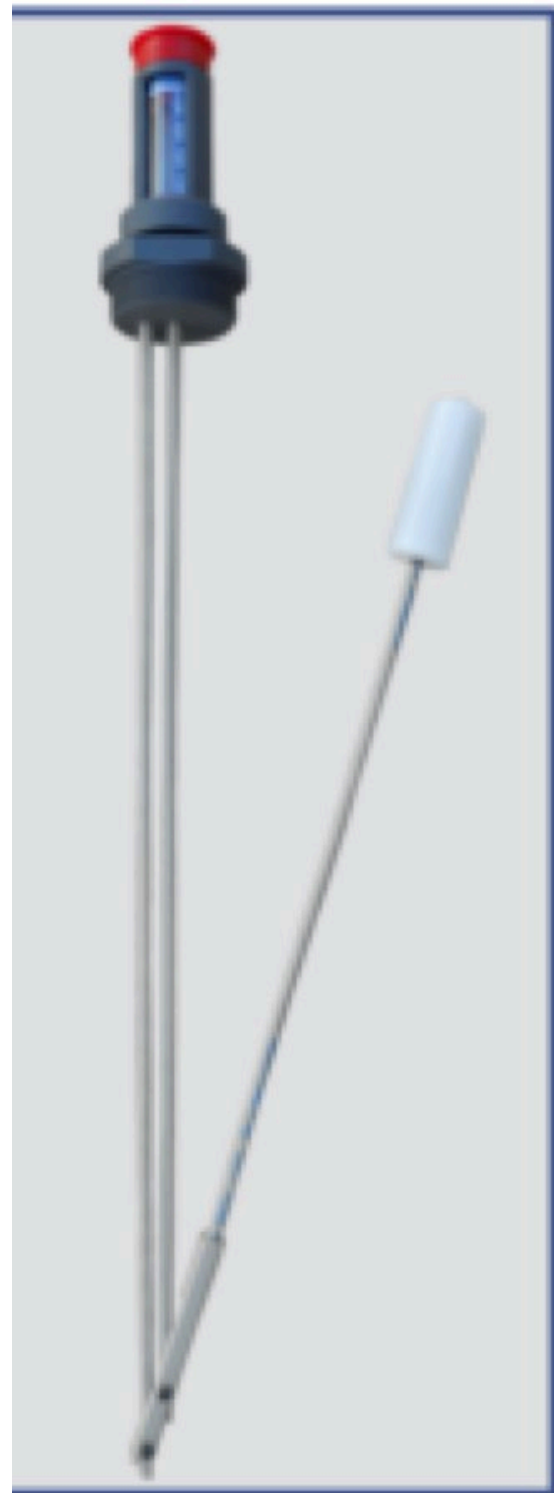


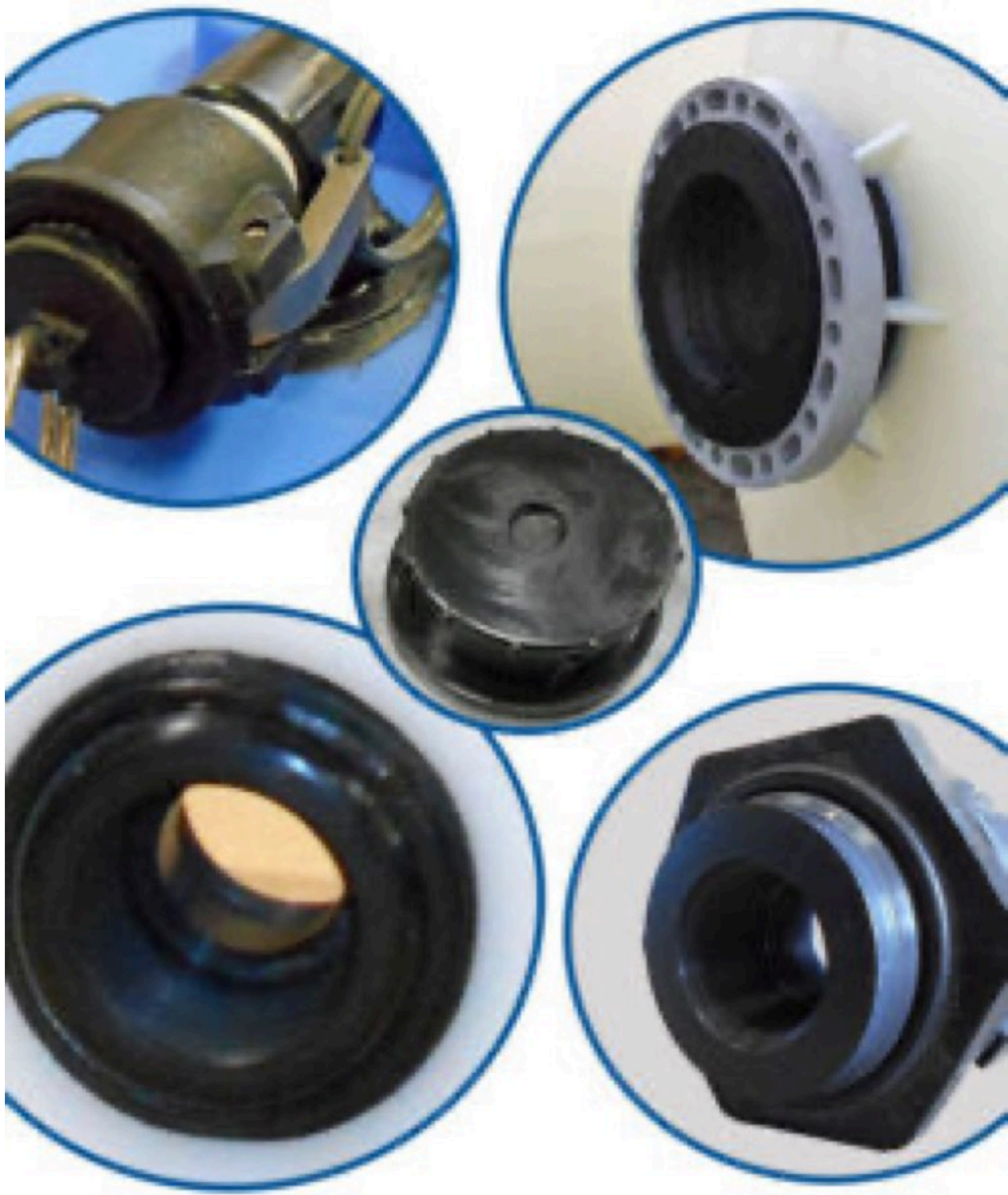


LEVEL MONITORING & BULKHEAD FITTINGS

Real Material/Temperature Compatibility Table

Material	Temp Range	Notable
Viton/FKM (gasket)	-20-302°F	Explicitly NOT suitable for caustic chemicals
X-Link/XLPE (gasket)	32-140°F	No form memory – can leak on reinstall
Tealon (gasket)	-40-302°F	Most universal – inert, non-flammable, dielectric
316 SST (bulkhead body)	Beyond plastic range	Widest chemical resistance, handles temps beyond plastic fittings





CUSTOM MOLDED & OEM TANKS

Rotational Molding to 15,000 Gallons

"A full service custom design and fabrication department that can design and build a custom product to your specifications" for applications outside the standard catalog.

Capability	Detail
Materials	Polyethylene, Polypropylene, PVDF, Fiberglass, Steel
Fabrication	Thermopneumatic welding, thermal fusion, custom machining, rotational mold making
High-Temp Fiberglass Overwrap	Extends poly tank service to 180°F (from ~120°F standard)
Rotational Molding Capacity	Up to 15,000 gallons in a single molded piece



NEXT STEP

Send LibertyCES the process data, not a part number.

ProChem single-wall and Gemini dual-containment tanks — real Peabody model specs, but your actual application still has a specific chemical, concentration, and capacity that determines the correct resin and configuration.

Fluid, chemistry, concentration, temperature, required capacity, and secondary containment needs — that's what a real spec review needs to start.

Request a spec review

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