

LabWaste® Product

LabWaste® Standard CPVC & HDPE Neutralization Tanks



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PRODUCT

Contact Spears® for any Information not found.



LabWaste® Standard CPVC & HDPE Neutralization Tanks

Acid Neutralization/Dilution Tanks for Use With LabWaste® CPVC Systems

Neutralization or dilution tanks are required by codes for the purpose of neutralizing corrosive wastes. Corrosive liquids, spent acids or other harmful chemicals that destroy or damage a drain, sewer, soil or waste pipe, or create noxious or toxic fumes or interfere with sewage treatment processes are prohibited from discharge into the plumbing system without being neutralized or treated. Spears® offers a standard selection of HDPE tanks in 5 gallon to 3000 gallon capacities and CPVC tanks in 5 gallon to 55 gallon capacities with connection and vent options listed below, plus convenient 1- gallon Dilution Tank designed for under-sink installation. Tanks can also be produced in virtually any custom size, shape, or connection configuration. Contact Spears® Technical Services with desired specifications for custom quotation.

Standard HDPE Round Tanks Technical Information

Construction: HDPE – High Density Polyethylene

Tank Capacity US Gallons	Approx Useable Capacity, US Gallons		Inside Dimension Dia. x Ht. (in.)	Wall Thickness (in.)	Approx Weight (lbs)	Standard Inlet & Outlet Connection Size (in.)	Standard Fitting Connection	LabWaste™ Transition Connection Fitting ³	Optional ⁴ Vent Connection Size (in.)	Approx. Centerline Height (in.) ⁵		
	Without Limestone	With Limestone								Inlet	Outlet	Vent
5	3	1	11 x 14	3/16	10	1-1/2 or 2	Mipt	P101	1-1/2 or 2	11	8	12
15	7	2	18 x 15	3/16	20	1-1/2 or 2	Mipt	P101	1-1/2 or 2	11	8	12
30	19	6	18 x 29	3/16	35	3	Mipt	P101	2 or 3	23	19	25
55	35	12	22 x 36	3/16	50	4	Mipt	P101	3 or 4	27	23	31
100	77	26	28 x 42	1/4	85	4	Mipt	P101	3 or 4	35	31	37
150	105	35	31 x 48	1/4	100	4	Mipt	P101	3 or 4	38	34	42
175	135	45	30 x 60	1/4	125	4	Mipt	P101	3 or 4	51	47	54
200	137	46	36 x 48	1/4	125	4 or 6	Mipt/Flange	P101/854	4 or 6	38	34	42
275	186	62	42 x 48	1/4	160	4 or 6	Mipt/Flange	P101/854	4 or 6	38	34	42
300	230	76	36 x 74	5/16	175	4 or 6	Mipt/Flange	P101/854	4 or 6	61	56	65
350	243	81	48 x 48	5/16	200	4 or 6	Mipt/Flange	P101/854	4 or 6	38	34	42
500	395	132	52 x 60	3/8	225	4 or 6	Mipt/Flange	P101/854	4 or 6	51	47	54
550	447	149	48 x 72	3/8	275	4 or 6	Mipt/Flange	P101/854	4 or 6	64	60	67
650	548	183	48 x 84	3/8	375	4 or 6	Mipt/Flange	P101/854	4 or 6	75	71	76
1200	1052	351	69 x 84	3/8	600	4 or 6	Mipt/Flange	P101/854	4 or 6	74	68	76
2000 ¹	1559	521	84 x 84	1/2	850	4 or 6	Mipt/Flange	P101/854	4 or 6	74	68	76
3000 ¹	2203	735	95 x 97	1/2	1350	4 or 6	Mipt/Flange	P101/854	4 or 6	87	83	91



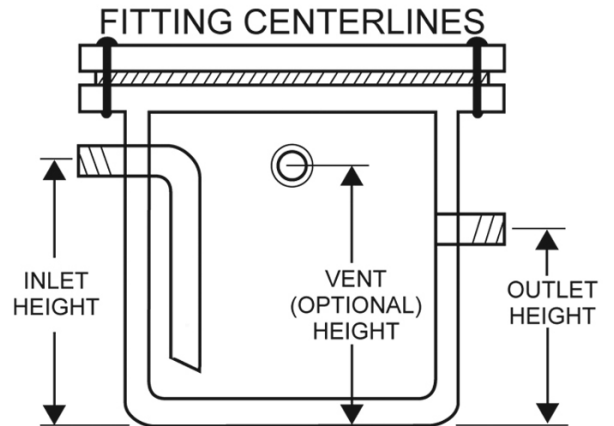
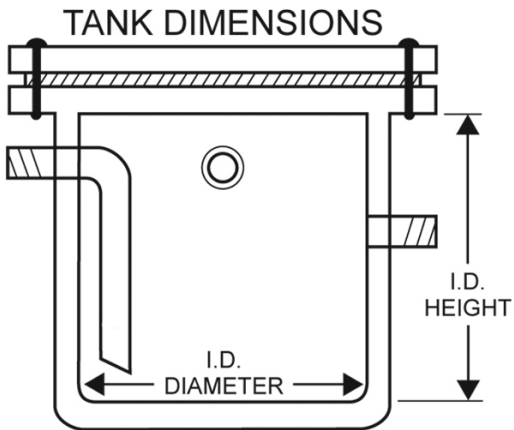
Standard CPVC Round Tanks Technical Information

Construction: Chlorinated Polyvinyl Chloride (CPVC)

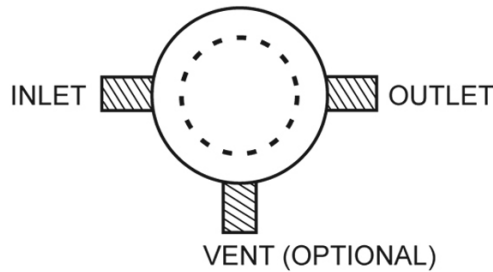
Tank Capacity US Gallons	Approx Useable Capacity, US Gallons		Inside Dimension Dia. x Ht. (in.)	Wall Thickness (in.)	Approx Weight (lbs)	Standard ² Inlet & Outlet Connection Size (in.)	Standard Fitting Connection	LabWaste® Transition Connection Fitting ³	Optional ⁴ Vent Connection Size (in.)	Approx. Centerline Height (in.) ⁵		
	Without Limestone	With Limestone								Inlet	Outlet	Vent
5	5	3	12-3/8 x 14-11/16	3/16	20	1-1/2 or 2	Soc	direct	1-1/2 or 2	11	8	12
15	15	7	17-11/16 x 17-1/4	3/16	35	1-1/2 or 2	Soc	direct	1-1/2 or 2	11	8	12
30	30	18	17-5/8 x 33	3/16	54	3	Soc	direct	2 or 3	23	18	25
55	55	35	23-1/2 x 38-1/2	1/4	70	4	Soc	direct	3 or 4	27	23	31

Important Notes

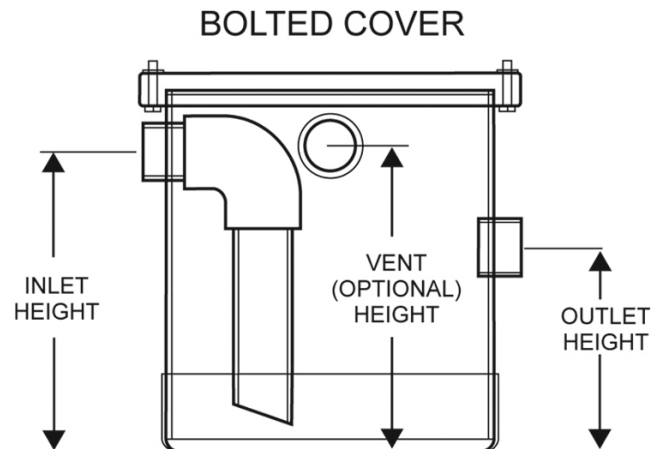
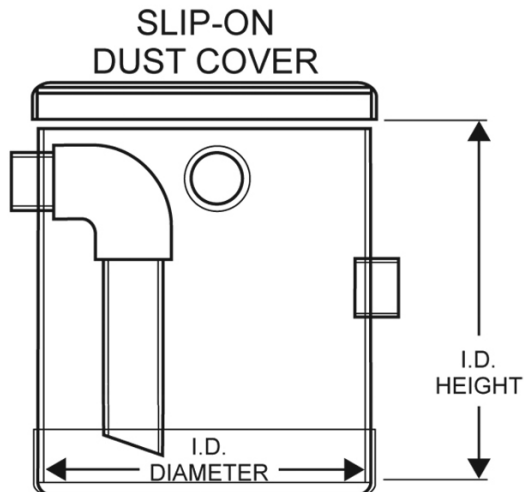
1. Larger HDPE tanks may include exterior steel banding or fiberglass reinforcement for additional strength. Special ordered optional inspection manhole ports are recommended for larger tanks (includes cover with neoprene gasket, stainless steel nuts, bolts, and washers).
2. All tanks can be special ordered with Mipt, Flanged (150#), and Fipt connections or varying combinations other than standard connections specified. Inlets or vents may also be custom ordered for installation in covers instead of tank sides.
3. For transitions from Mipt HDPE tank connections to **LabWaste®** piping use part numbers P101-xxxC, Female Adapter. CPVC tank sockets can be cemented directly to **LabWaste®** piping. For transitions from ALL flanged connections to **LabWaste®** piping use part numbers 854-xxxC, Flange (xxx = size code).
4. Venting is required by codes but may be accomplished either at the tank or in-line.
5. Neutralization tanks and tank extensions are not warranted for direct burial applications. Tanks must be properly placed and secured with no applied stresses, within a dry concrete vault with use of a protective traffic cover as deemed appropriate. However, if direct burial is used without warranty, custom centerlines must be furnished from top of cover down to fitting centerline instead of specified tank bottom to fittings centerline since tank heights can vary.



TOP VIEW
STANDARD FITTING LOCATIONS



(Advise If You Want
Standard Locations Changed)





LabWaste® Standard HDPE Round Neutralization Tanks

Nominal US Gallons	Inlet & Outlet Size (in.)	Inlet & Outlet Connection	HDPE Tank Part No.	Prod Code
5	1-1/2	Mipt	T20051414B 955.17	169
5	2	Mipt	T20052424B 955.17	169
15	1-1/2	Mipt	T20151414B 1500.98	169
15	2	Mipt	T20152424B 1500.98	169
30	3	Mipt	T20303434B 2142.31	169
55	4	Mipt	T20554444B 2723.59	169
100	4	Mipt	T21004444B 3615.99	169
150	4	Mipt	T21504444B 4707.6	169
175	4	Mipt	T21754444B 6140.35	169
200	4	Mipt	T22004444B 6686.16	169
275	4	Mipt	T22754444B 7846.01	169
300	4	Mipt	T23004444B 8596.49	169
350	4	Mipt	T23504444B 8937.62	169
500	4	Mipt	T25004444B 12280.71	169
550	4	Mipt	T25504444B 14532.16	169
650	4	Mipt	T26504444B 16169.59	169
1200	4	Mipt	T212C4444B 29883.04	169
2000	4	Mipt	T220C4444B 41617.94	169
3000	4	Mipt	T230C4444B 57241.72	169

Optional Vent Outlet(recommended) for HDPE Tank			
Vent Size (in.)	Vent Connection	Add-on to Part No.	Prod Code
1-1/2	Mipt	14	169
2	Mipt	24	169
3	Mipt	34	169
4	Mipt	44	169
6	Mipt	63	169

Example: T20051414B14

These are most commonly used tanks and vent options
Contact Spears® for availability of desired variations



LabWaste® Standard CPVC Round Neutralization Tanks

LabWaste® Standard CPVC Round Neutralization Tanks

Additional Inlet/Outlet Sizes, Combinations & Custom Configurations Available

Nominal US Gallons	Inlet & Outlet Size (in.)	Inlet & Outlet Connection	CPVC Tank Part No.		Prod Code
			Dust (slip) Cover	Bolted Cover	
5	1-1/2	socket	T30051212A 1529.33	T30051212B 3514.41	169
5	2	socket	T30052222A 1690.58	T30052222B 2630.2	169
15	1-1/2	socket	T30151212A 2111.88	T30151212B 4885.41	169
15	2	socket	T30152222A 2111.88	T30152222B 4885.41	169
30	3	socket	T30303232A 2824.29	T30303232B 5487.82	169
55	4	socket	T30554242A 5454.8	T30554242B 9032.61	169

Optional Vent Outlet(recommended) for CPVC Tank

Vent Size (in.)	Vent Connection	Add-on to Part No.	Prod Code
1-1/2	Socket	12	169
2	Socket	22	169
3	Mipt	34	169
4	Mipt	44	169
6	Mipt	63	169

Example: T30051212A12
Call Spears for MSRP.

**These are most commonly used tanks and vent options
Contact Spears® for availability of desired variations**

Neutralization Tank Sizing Table

The following recommendation from the American Society of Plumbing Engineers (ASPE) may be used as a guideline for sizing tanks according to the number of lab sinks.

Number of Lab Sinks	Tank Size	Gal (L)
2	5	18.9
4	15	56.8
8	30	113.6
16	55	208.2
22	75	283.9
27	90	340.7
30	108	408.8
40	150	567.8
50	175	662.4
60	200	757.0
75	275	1040.9
110	360	1362.6
150	500	1898.5
175	550	2081.8
200	650	2460.3
300	1200	4542
500	2000	7570
600	3000	11355

Note: For commercial and industrial laboratories, the number of lab sinks should be multiplied by a 0.5 use factor. (ASPE Data Book Vol. 3, Page 42, 2001).

LabWaste® Product
1-Gallon LabWaste® Dilution Tanks



LabWaste® 1-Gallon CPVC Dilution Tanks

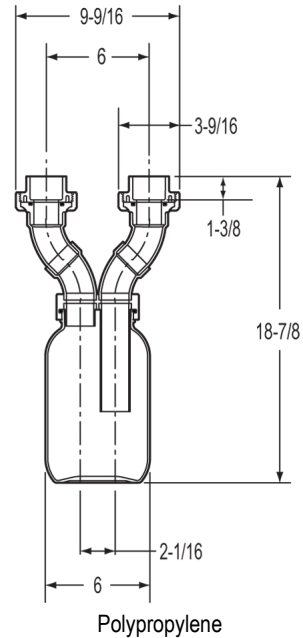
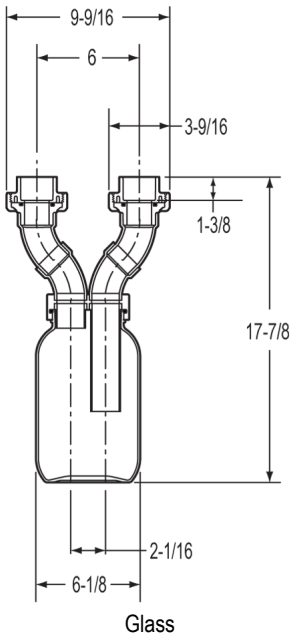
Provides chemical dilution from water rinse during use. Designed for under-sink installations. CPVC construction with Glass or PP Jar type tank.

Nominal US Gallons	Inlet & Outlet Size (in.)	Inlet & Outlet Connection	CPVC Tank Part Glass Jar Tank No.	Prod Code
1	1-1/2	Socket Union	T3001G1515 443.47	169

Nominal US Gallons	Inlet & Outlet Size (in.)	Inlet & Outlet Connection	CPVC Tank Part Polypropylene Jar Tank No.	Prod Code
1	1-1/2	Socket Union	T3001P1515 319.29	169



Dimensions





LabWaste® Product
1-Gallon LabWaste® Dilution Traps

LabWaste® 1-Gallon CPVC Dilution Traps

Provides chemical dilution from water rinse during use. Designed for under-sink installations as a trap. CPVC construction with Glass or PP Jar type tank.

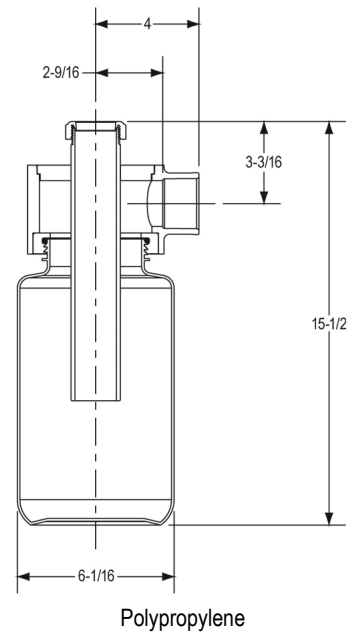
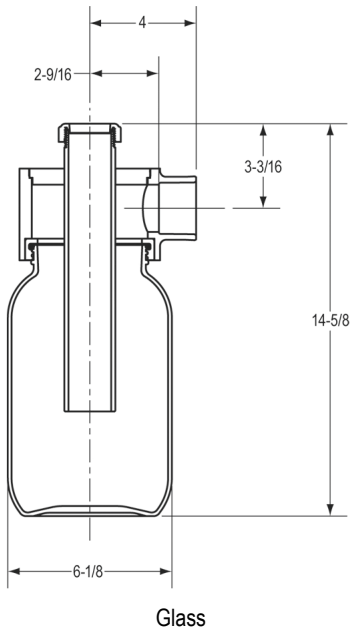
Nominal US Gallons	Inlet & Outlet Size (in.)	Inlet	Outlet	CPVC Tank Part Glass Jar Tank No.	Prod Code
1	1-1/2	Socket	Socket	T4001G1612 443.47	169

Nominal US Gallons	Inlet & Outlet Size (in.)	Inlet	Outlet	CPVC Tank Part Polypropylene Jar Tank No.	Prod Code
1	1-1/2	Socket	Socket	T4001P1612 319.29	169

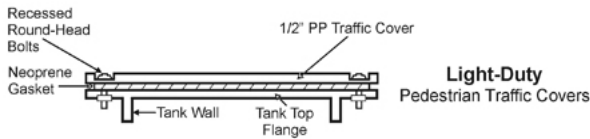


Note: Slip connections are for sink drain tailpiece.

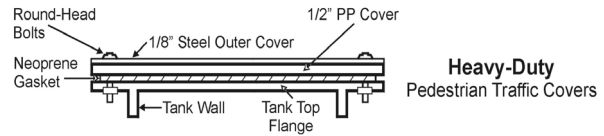
Dimensions



LabWaste® Product
LabWaste® Optional Covers



Light-Duty
Pedestrian Traffic Covers



Heavy-Duty
Pedestrian Traffic Covers

Pedestrian Traffic Covers

Traffic Covers are quoted and ordered separately with tank order in lieu of standard tank cover. Constructed from 1/2" white PP with recessed bolts and anchoring nuts. Covers are designed for light pedestrian traffic and flush floor installation.

Heavy-Duty Pedestrian Traffic Covers

Traffic Covers are quoted and ordered separately with tank order in lieu of standard tank cover. Constructed with 1/8" steel, primer coated, over 1/2" white PP with round head slotted bolts and anchoring nuts. Heavy-Duty Traffic Covers are designed for heavy pedestrian traffic and flush floor installation.

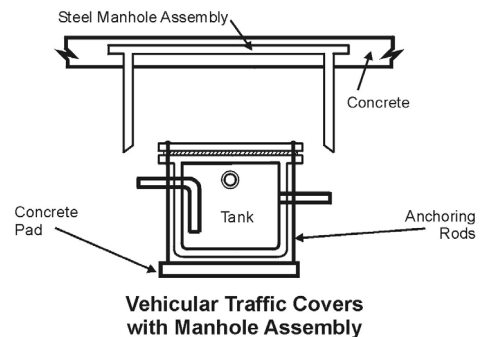
Part Number	Tank Size Range	Prod Code
PTC-5 806.34	5-gal thru 55-gal	169
PTC-100 967.59	100-gal thru 300-gal	169
PTC-350 1370.76	350-gal thru 650-gal	169
PTC-1200 2418.99	1200-gal thru 3000-gal	169

Part Number	Tank Size Range	Prod Code
HPTC-5 1612.65	5-gal thru 55-gal	169
HPTC-100 1845.16	100-gal thru 300-gal	169
HPTC-350 2741.81	350-gal thru 650-gal	169
HPTC-1200 4837.96	1200-gal thru 3000-gal	169

Vehicular Traffic Covers

Vehicular Traffic Covers are quoted and ordered separately with tank. Covers are constructed from minimum 3/8" Diamond Plate steel supported by an external steel frame. Standard tank covers are used on tanks located below these steel manhole assemblies. Requires concrete pad below tank. Check with factory for frame height (may be extended in the field).

Part Number	Cover Size	Tank Application	Approx. Wt.(lbs.)	Prod Code
VTC18R 1310	18" round	Fits 5-gallon units	100	169
VTC24S 1964.95	24" square	Fits 5-gallon units	100	169
VTC30R 3274.95	30" round	Fits 15 & 30-gallon units	150	169
VTC30S 3274.95	30" square			169
VTC36R 3930.42	36" round	Fits 55-gallon units	200	169
VTC36S 3930.42	36" square			169
VTC42R 4781.28	42" round	Fits 100, 150 & 175-gallon units	300	169
VTC42S 4781.28	42" square			169
VTC48R 5758.51	48" round	Fits 200 & 300-gallon units	400	169
VTC48S 5758.51	48" square			169
VTC54R 13099.58	54" round	Fits 275-gallon units	500	169
VTC54S 13099.58	54" square			169
VTC60R 15182.22	60" round	Fits 350, 550 & 650-gallon units	750	169
VTC60S 15182.22	60" square			169





LabWaste® Manhole Ports, Tank Extensions and Limestone Chips

Optional Inspection Manhole Ports & Tank Extensions

Manhole Assemblies are quoted and ordered separately with tank order in lieu of standard tank cover. Assemblies include matching covers, Neoprene gaskets and stainless steel nuts, bolts, and washers; fabricated into the standard tank cover.

Part Number	Manhole Size	Prod Code
MH180 1967.76	18	169
MH110 1008.59	11	169
MH060 588.08	6	169
MH040 466.71	4	169

Tank Extensions

Tanks may be special ordered with extensions to increase the overall height of the tank. Extensions ranging from 1" to almost two (2) times the tank height are at a charge of double the MSRP for the basic tank. For example, a 55-gallon tank has a height of 36". Extended tank heights of 37" to 70" are twice the MSRP of a standard 55-gallon tank. For higher extensions, contact Spears®. Special covers are needed for flush floor, in-ground installations. Standard covers are not designed for any traffic or load bearing.

Limestone Chips for Acid Neutralization Tanks

Most state and local codes require the addition of a neutralization medium in acid waste tanks with the addition of water for dilution prior to discharge into a sanitary sewer system. Limestone must be 1" to 3" in diameter with a calcium carbonate content of at least 90%. Spears® offers high grade Limestone Chips having a calcium carbonate content of approximately 95%. The use of Limestone Chips is generally one of the best and least expensive means of acid neutralization, but may be used in conjunction with more sophisticated chemical treatments if necessary.

How Much to Use: The following is a guideline for pounds of Limestone Chips to use for one (1) tank filling (charge). It is recommended that sufficient quantity be ordered for more than one filling.

Tank Size (gallons)	Approx. Pounds
5	50
15	100
30	200
55	500
100	1,000
150	1,750
175	1,900
200	2,500
275	3,200
300	3,200
350	4,000
500	5,000
550	7,500
650	9,000
1200	11,000
2000	16,000
3000	25,000

Maintenance: Tanks should be inspected routinely for accumulation of precipitated sludge and debris that must be cleaned out (usually scooped out) and for periodic addition of limestone and water if necessary. While once every one to three months may be sufficient, professional assistance should be sought to establish a proper schedule based on actual use. Note: Tank must be filled with water prior to carefully adding Limestone Chips to charge the system. Request instruction sheet.

Standard 50-lb. Bags Regular & Dolomitic Limestone

Limestone Chips are conveniently packaged in 50-lb. plastic bags but may be special ordered loose. Actual bag weight may vary by +15%. Special dolomitic limestone is used for wastes predominantly composed of sulfuric acid (battery acid). Allow three to five weeks delivery.

Part Number	Contact Spears® for MSRP on multiple bag purchases				Prod Code
	1-4 bags	5-20 bags	21-39 bags	40 & up bags	
Regular Limestone					
RLC-50					169
Dolomitic Limestone					
DLC-50					169

See MSRP-1 publication for standard pricing