Critical Process Vessels

Superior Performance For Your Demanding Applications

SAINT-GOBAIN
PERFORMANCE PLASTICS

Saint-Gobain High-Performance Vessels

Where Quality and Toughness Count,There's a Saint-Gobain High-Performance Tank

Saint-Gobain Performance Plastics tanks are tough. They're lightweight and corrosion-resistant. Their seamless design eliminates the major cause of leakage associated with lesser quality plastic tanks. Saint-Gobain Performance Plastics tanks won't wick or crack like fiberglass. And, our tanks are easier to maintain and much less expensive than stainless steel. Saint-Gobain Performance Plastics tanks are rotationally molded in a variety of high-quality virgin resin materials to match your specific application.

Our products are manufactured under a quality management system registered as complying with ISO 9001:2000, which has been independently certified by BVQi.

Reliability and Toughness Expanded

Saint-Gobain Performance Plastics also offers high-quality blowers, safety equipment, fittings and accessories. Like our tanks, they feature the quality, reliability and toughness you've come to expect from Saint-Gobain.

Service and Support— We're Here When You Need Us

Saint-Gobain Performance Plastics offers free technical assistance and a knowledgeable network of sales representatives committed to your complete satisfaction. We'll help you select the right Saint-Gobain Performance Plastics product for your specific requirements. We'll educate, inform and demonstrate the advantages our tanks offer over other competitive containers. And with our exclusive warranty, we'll supply you with a reliable system that will last and last.

Saint-Gobain Performance Plastics Rotational-Molded Tanks Offer Distinct Advantages

Service Depends on Contents, Location, Temperature and Other Conditions

- Lower cost than stainless steel or fiberglass
- Virtually maintenance-free
- Seamless construction for easy cleaning
- Available in a wide variety of resins and leakproof service
- Most tanks have a visible liquid level
- Controlled wall thickness without corner thinning
- Lightweight; less than one-half the weight of steel

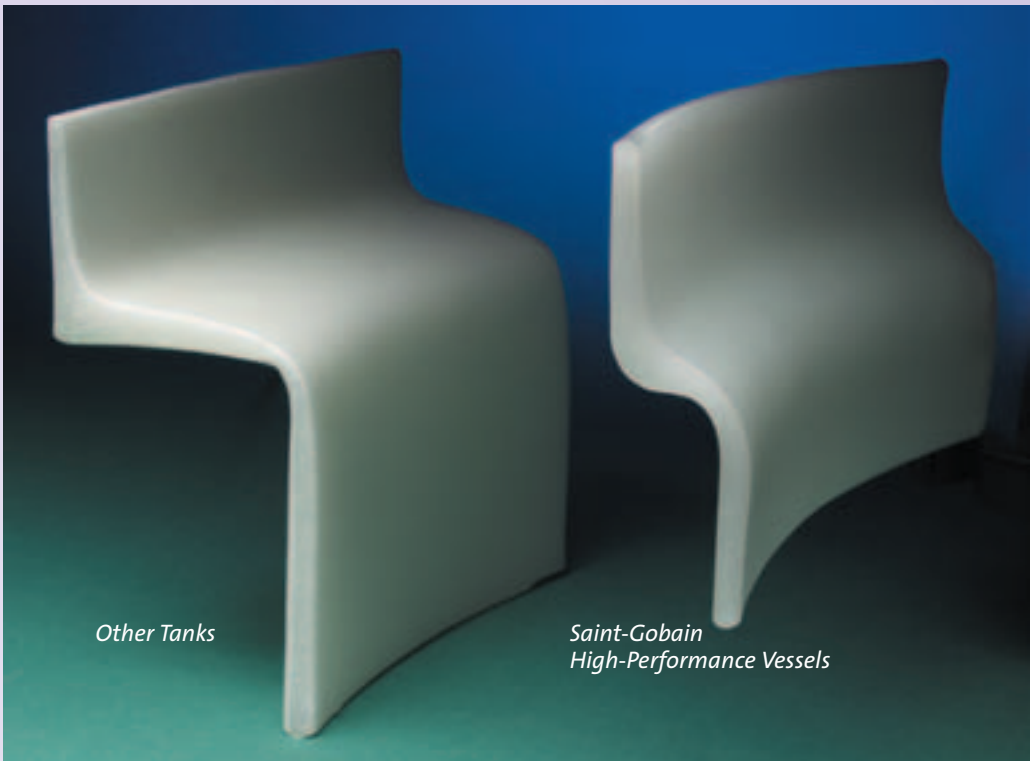
Special Notes

- Tanks with Fiberglass-Reinforced Polyester (FRP) Casings offer service to higher temperatures and with higher specific gravity contents.
- Operating conditions and chemical usage can decrease maximum service temperatures.
- Continuous service temperatures in ranges above ambient can affect tanks in at least two ways: 1) the useful life of the tank may be shortened; and 2) the ability of the container to maintain its shape may decrease, perhaps resulting in distortion.

Plastic tanks which are subject to chemical, physical and/or thermal exposure should be inspected on a routine basis for any signs of leaking, cracking, discoloration, bulging or other deviations from the "as new" condition. The frequency of inspection will be highly dependent upon actual use conditions, as well as the age of the tank. Specific guidelines must be determined by the user dependent upon actual use conditions. Saint-Gobain Performance Plastics cannot provide specific guidelines due to the wide variety of applications and their effects on plastic tanks. Please consult this catalog or contact Saint-Gobain Performance Plastics for more information.

Quality Design Assures Long, Reliable Life

Our tanks feature generous, rounded corners that have less molded-in stress. This construction makes them less likely to crack and easier to clean.



How To Select Your High-Performance Tank

Tank Resin Selection Guide — Typical Properties and Applications[1]

Material RESIN	General Chemical Resistance	Stress-Crack[2] Resistance	Maximum Service Temperature	Brittleness Temperature	Impact Resistance[3]	Can Be Welded (Hot Gas)	Food-Grade Acceptability NATURAL, UNPIGMENTED	Color NATURAL, UNPIGMENTED
HDPE High Density Polyethylene	Very Good	Good	140°F 60°C	-94°F -70°C	Good	Yes	Yes[4] Natural and Black	White
XLPE Cross-Linked High Density Polyethylene	Very Good	Excellent	140°F 60°C	-180°F -118°C	Excellent	No	No	Yellow
PP Polypropylene	Very Good	Excellent	220°F 104°C	32°F 0°C	Fair	Yes	Yes[4]	Off-White
PVDF Polyvinylidene Fluoride	Excellent	Excellent	230°F 110°C	-40°F -40°C	Fair	Yes	Yes[4]	Off-White

Tank Resin Selection Guide — (continued)

Material RESIN	ADVANTAGES AND APPLICATIONS			DO NOT USE WITH:
HDPE High Density Polyethylene	•Hard, smooth finish •Good temperature resistance •Less expensive than stainless steel or fiberglass	•Storing caustics •Metal finishing •Storing organic and inorganic acids •Water treatment	•Dispensing lab and photo chemicals •Plating •Brine	Strong oxidizing agents, aromatic hydrocarbons, halogenated-aliphatic hydrocarbons, liquefied petroleum gas, solvents
XLPE Cross-Linked High Density Polyethylene	•Suitable for many corrosives not handled by FRP •Storing corrosives, including sulfuric, hydrochloric and hydrofluoric acids	•Storing sodium hypochlorite (See statement on page 38) •Storing organic and inorganic chemicals and compounds	•Chemical processing •Storing boiler treatment chemicals •Water and wastewater treatment	Strong oxidizing agents, aromatic hydrocarbons, halogenated-aliphatic hydrocarbons, liquefied petroleum gas, solvents
PP Polypropylene	•Good resistance to many organic chemicals •Less expensive than comparable stainless steel tanks	•Weldable PP fittings available •Plating and pickling lines •Sanitary process tanks	•Etch tanks for processing silicone wafers	Strong oxidizing agents; aromatic or chlorinated hydrocarbons, sub-freezing temperatures
PVDF Polyvinylidene Fluoride	•Superior resistance to inorganic acids, strong oxidizing agents and halogenated compounds •High-purity; does not contaminate process fluids •PVDF Schedule 80 threaded fittings available	•Etch tanks for processing silicone wafers •Ultra-pure water storage (not potable) •Precious metal recovery •Storing and processing halogenated compounds (i.e., bromine)	•Storing bleach and sulfuric acid for pulp and paper processing •Industrial battery casings •Insecticide manufacturing	Ketones, esters and hot, concentrated caustics; nascent chlorine gas and concentrated caustic soda

NOTES:

1 At low temperatures, protect all tanks from impact. Below 40°F/4°C, specify XLPE Tanks.

2 Cross-linked, high-density polyethylene is recommended for use with stress-cracking agents.

3 Brittleness temperature per ASTM test D-746. The impact resistance of most rotomolded tanks declines at freezing temperatures. Cross-linked, high-density polyethylene tanks are well suited for cold storage.

4 The resins used in Saint-Gobain Performance Plastics linear low- and high-density polyethylene and polypropylene tanks comply with 21 CFR Regulation 177.1520. Polyethylene meets all food-grade requirements; however, this product is restricted to contacting food only of the types identified in 21 CFR 176.170 Table 1, under categories 1, IV-B, VII-B, VIII, and under conditions of use B through H described in Table 2 of 21 CFR 176.170. Saint-Gobain rotomolded polypropylene complies with FDA 21 CFR 177.1520 (c) 3.1 regulation. The resin used in PVDF tanks complies with 21 CFR 177.2510.

5 Open-top tanks do not contain UV stabilizer; black is recommended for certain applications. Bulk tanks are UV-stabilized and may be used outdoors.

General Guide to Open-Top Tanks

Plastic Tanks For High-Purity Storage

Saint-Gobain Performance Plastics high-performance tanks are the best and toughest in the industry. Exacting CAD-based designs, the highest quality virgin resins and tough construction provide excellent solutions for general purpose applications. The tanks are translucent and feature molded-in graduations.

Each tank comes with a matching cover the same thickness as the wall. The open-top unit covers fit like a shoe box; bolted or welded covers are available upon request.

Closed-dome tanks are available for applications requiring a completely closed vessel. The 6" threaded polypropylene covers prevent evaporation and spills.

Our open-top tanks are rated for use with 1.8 specific gravity media. If a fiberglass casing is used, the rating goes up to 2.2. Casings provide structural support and prevent bulging at the bottom of the tank. They should be used with rectangular units with any dimension greater than 18 inches. Casings are also required for use with media having a specific gravity greater than 1.8 or for use at prolonged elevated temperatures.

Our stands, mixers, and casings have been pre-engineered for compatibility. Simply choose your tank size and the size codes of the accessories will match.

Fabrication is available for all Saint-Gobain Performance Plastics tanks. Modifications can be made to the covers or the sides. Contact customer service for quotations. Welded and mechanical fittings can be installed, as well as a full line of accessories.

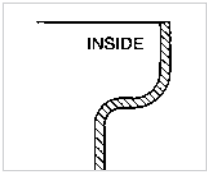
Materials Overview

High Density Polyethylene (HDPE):	Cross-Linked Polyethylene (XLPE):
• FDA 21 CFR 177.1520	• Not FDA
• Hard, Smooth Finish	• Cannot be welded
• Very Good Chemical Resistance	• Better Chemical Resistance to HDPE
• Good Stress-Crack Resistance	• Excellent Stress-Crack Resistance
• Max Service Temp—140°F	• Max Service Temp—140°F
• Translucent White	• Yellow (Bulk Tanks—Gray)
Polypropylene (PP):	**Polyvinylidene Fluoride (PVDF):**
• FDA 21 CFR 177.1520	• FDA 21 CFR 177.2510
• USP Class VI, Non-cytotoxic	• High-Purity Material/Low Extractables
• Hard, Smooth Finish	• Larger sizes require casings
• Very Good Chemical Resistance	• Inherent UV Resistance
• Excellent Stress-Crack Resistance	• Excellent Chemical Resistance
• Max Service Temp—220°F	• Max Service Temp—230°F
• White	• Off-White

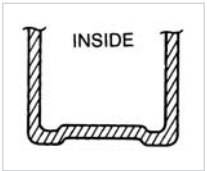
Maximum service temperature listings refer to temperatures that should not be exceeded for the materials utilized in the specific product line. Many factors including media, specific gravity of media, external stresses, product geometry, environment, and others affect suitability of material.

Structural Designs

Cylindrical tanks feature a stepped-flange design that adds rigidity and strength while helping to contain drips. Tanks over 30 gallons feature a slightly raised bottom that channels liquids to tank walls and fittings. Spoked bottoms reinforce larger tanks over 55 gallons and provide near-total drainage.



STEPPED-FLANGE



UP TO 30 GALLON RAISED BOTTOM


55 AND 80 GALLON SPOKED BOTTOM


100 GALLON AND ABOVE SPOKED BOTTOM

Flat-Bottom Cylindrical Tanks

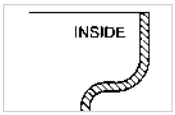
Flat-Bottom Cylindrical Tanks

CAT. NO. 11100

CAT. NO. 11102

CAT. NO. 11300

- All tanks come with covers
- Brim capacity 10% over



STEPPED-FLANGE

1000-GALLON COVER

WARNING: Never use FRP casings alone as a tank. Always use a liner. For continuous service at elevated temperatures or storage of high specific-gravity materials, always use an FRP casing with your tank.

Nominal Wall Thickness By Resin

Size (gallons)	Size Code	Grad. (gal./liter)	Nom. Tank Dimensions (O.D. x Depth, in.) *(CASING DIM.)*	HDPE, Heavyweight (Avail. in Black, No. 18100) Natural Cat. No. 11100	HDPE, Heavyweight (Avail. in Black, No. 18100) w/ Spigot Cat. No. 11102**	HDPE, Lightweight Natural Cat. No. 54100	HDPE, Lightweight Natural Cat. No. 54102	XLPE, Heavy-weight (Avail. in Black, No. 18300) Natural Cat. No. 11300	PP, Heavy-weight (Avail. in Black, No. 18200) Natural Cat. No. 11200	PVDF Natural Cat. No. 11500	Approx. Shipping (wt., lbs.) Tank Light	Tank Heavy	w/Casing 19000
5	-0005	0.5/2	11 x 15 —	3/16	3/16	3/32	3/32	3/16	3/16	3/32	4-1/2†	5†	N/A
7.5	-0007	0.5/*	12 x 18 —	3/16	3/16	3/32	3/32	3/16	3/16	N/A	6-1/2†	7-1/2†	N/A
10	-0010	1/*	13 x 20 —	3/16	3/16	3/32	3/32	3/16	3/16	3/32	6-1/2†	9†	N/A
15	-0015	1/4	13 x 27 —	3/16	3/16	3/32	3/32	3/16	3/16	3/32	8†	11-1/2†	N/A
30	-0030	2.5/10	18 x 30 *19-1/8 x 30-1/4*	3/16	3/16	3/32	3/32	3/16	3/16	3/32	12†	19†	42†
55	-0055	2.5/10	22 x 36 *23 x 36-1/4*	1/4	1/4	3/32	3/32	1/4	1/4	1/8	20-1/2†	31	53
80	-0080	5/20	24 x 48 *24-3/4 x 48-1/4*	1/4	N/A	N/A	N/A	1/4	1/4	1/8**	N/A	50	80
100	-0100	5/20	28 x 44 *29-3/16 x 44-1/4*	1/4	N/A	N/A	N/A	1/4	1/4	1/8**	N/A	50	80
150	-0150	10/40	31 x 49 *32-7/16 x 49-1/4*	1/4	N/A	N/A	N/A	1/4	1/4	1/8**	N/A	60	135
200	-0200	25/200	36 x 51 *37-1/2 x 51-1/4*	1/4	N/A	N/A	N/A	1/4	1/4	1/8**	N/A	67-1/2	150
275	-0275	25/100	42 x 49 *43-1/2 x 49-1/4*	1/4	N/A	N/A	N/A	1/4	1/4	1/8**	N/A	101	200
360	-0360	25/100	48 x 49 *48-3/8 x 49-1/4*	1/4	N/A	N/A	N/A	1/4	1/4	N/A	N/A	120	296
500	-0500	25/100	53 x 62 *54-1/8 x 62-1/4*	5/16	N/A	N/A	N/A	5/16	N/A	N/A	N/A	150	300
1,000	-1000	50/250	66 x 72 *67-1/2 x 72-1/4*	7/16	N/A	N/A	N/A	7/16	N/A	N/A	N/A	389	500
Maximum Service Temperature				140°F 60°C		140°F 60°C		140°F 60°C	220°F 104°C	230°F 110°C			

**7.5- and 10-gallon cylindrical tanks do not have liter calibrations*
†Within UPS size restrictions
***Casing required*
††These sizes quoted on request
For replacement spigot, see page 13
N/A=Not Available

Maximum service temperature listings refer to temperatures that should not be exceeded for the materials utilized in the specific product line. Many factors, such as chemical resistance, specific gravity, external stresses, product geometry, environment and many others affect the suitability of a particular product. For additional information, contact Saint-Gobain Performance Plastics.

Conical-Bottom Tanks

Conical-Bottom Tanks

- 30° cone angle (18° for 400 gallons, 45° for 500 gallons)
- Complete drainage
- Better dispersal of solids
- Easy installation of welded or bulkhead fittings
- HDPE and polypropylene resins comply with 21 CFR Reg. 177.1520 (Refer to chart on page 3)
  PVDF 21 CFR 177.2510
- Require metal stands (see page 9)
- Clearance from the floor to bottom of the tank is 18 inches (12 inches on 10-gallon tank)

WARNING: Never use FRP casings alone as a tank. Always use a liner. Always use an FRP casing with your tank for continuous service at elevated temperatures, or storage of high specific-gravity materials.

CAT. NO. 16120

Conical-Bottom Cylindrical Tanks — Nominal Wall Thickness By Resin

					HDPE	XLPE	PP	PVDF	Casing	Approx. Shipping	
Size (gallons)	**Size Code**	**Grad.** (gal./liter)	**Nom./Dim.** (O.D. x Depth*)	**Bottom Flat Dia.**	**Natural Cat. No. 16120**	**Natural Cat. No. 16320**	**Natural Cat. No. 16220**	**Natural Cat. No. 16520**	**17000**	(wt., lbs. Tank)	(wt., lbs. Tank w/ Casing)
10	**-0010**	1/5	13-1/4 x 23	3	5/32	5/32	5/32	3/32	N/A	10†	N/A
30	**-0030**	2.5/10	18 x 35	3	3/16	3/16	3/16	3/32	3/32	18	37
55	**-0055**	2.5/10	22 x 44	3	3/16	3/16	3/16	1/8	3/16	34	53
100	**-0100**	5/20	32 x 38	5	1/4	1/4	1/4	1/8	3/16	48	95
150	**-0150**	5/20	32 x 57	5	1/4	1/4	1/4	1/8**	3/16	82	150
250	**-0250**	25/100	43 x 54	5	5/16	5/16	5/16	1/8**	3/16	112	241
400	**-0400**	25/100	56 x 52	7	3/8	3/8	3/8	N/A	1/4	140	230
500	**-0500**	25/100	53 x 80	7	5/16	5/16	N/A	N/A	1/4	215	331
			Maximum Service Temperature		**140°F** 60°C	**140°F** 60°C	**220°F** 104°C	**230°F** 110°C			

**To cone flat N/A = Not Available*
***Casing required*
†Within UPS size restrictions
Cone Angles: 30° on 10, 30, 55, 100, 150, 250 gallon
18° on 400 gallon & 45° on 500 gallon

TANKS WITH CASING

Rectangular Tanks

A Complete Line of Rectangular Plastic Tanks from 2 to 500 Gallons

Used in Many Applications

Saint-Gobain Performance Plastics rectangular tanks have proven reliable in many demanding applications:

- Plating
- Etching
- Silicon wafer processing
- Circuit board production
- Photofinishing
- Food handling (except XLPE)
- Dry cleaning
- Metal parts degreasing
- Chemical processing
- Wastewater treatment
- Photographic applications

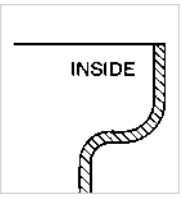
FRP (fiberglass-reinforced polyester) support casings are available for Saint-Gobain rectangular tanks. These casings are chemical-resistant and maintenance-free. Saint-Gobain Performance Plastics recommends using FRP casing or exterior support with all rectangular tanks used at elevated temperatures, with high specific gravity liquids or a dimension greater than 18 inches.

Choice of Four Premium Resins

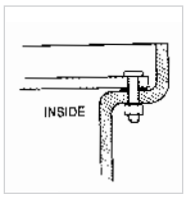
Our rectangular tanks are available in four premium resins: HDPE, XLPE, PP and PVDF. More than 50 configurations and three flange styles are offered. All rectangular tanks are rotationally molded in one piece. There are no fabricated seams that are prone to stress-cracking and failure. Molded tanks cost less than fabricated plastic tanks or stainless steel tanks of the same size. All rectangular tanks are supplied with cover.

These tanks offer a broad range of resistance to chemicals, stress-cracking, impact and abrasion, depending on the resin. (See the *Tank Resin Selection Guide*.) A wide variety of welded and bulkhead-style fittings are available (see pages 12-13).

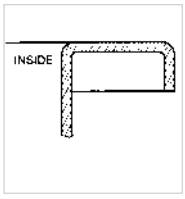
NOTE: Maximum service temperature listings refer to temperatures that should not be exceeded for the materials utilized in the specific product line. Many factors, such as chemical resistance, specific gravity, external stresses, product geometry, environment and many others affect the suitability of a particular product. For additional information, contact Saint-Gobain Performance Plastics.



STEPPED-FLANGE



STEPPED-FLANGE WITH 1/2" FLAT



FLAT-FLANGE

Tank Flange Styles Available

Stepped-Flange

- Easy mounting of small accessories
- Better drip containment of parts that are dipped

Stepped-Flange With 1/2" Flat

- To secure equipment support covers
- Stock tank comes with standard dust cover only; cover, bolts and gasket custom quote

Flat-Flange

- Often used in plating operations
- When ordered with FRP support casings, each tank can support up to 300 lbs. (i.e., plating rods)

Tanks With Flat Wide Flange

Nominal Interior Dimensions Inches, L x W x Depth	Size (gallons)	Stand Size Code	HDPE Cat. No. 14150	PP Cat. No. 14250	XLPE Cat. No. 14350	Casing Cat. No. 15000	Approx. Shipping (wt., lbs.) Tank	w/ Casing
24 x 12 x **12**	**15**	**-0020**	5/32	1/4	5/32	3/16	13†	33
24 x 18 x **18**	**30**	**-0045**	5/32	1/4	5/32	3/16	20†	35
Maximum Service Temperature			**140°F** 60°C	**220°F** 104°C	**140°F** 60°C			

**Casing recommended*
†Within UPS size restrictions

Rectangular Tanks

Rectangular Tanks — Nominal Wall Thickness By Resin

Nominal Interior Dimensions Inches, L x W x Depth	Size (gallons)	Stand Size Code	HDPE Cat. No. 14100	XLPE Cat. No. 14300	PP Cat. No. 14200	PVDF Cat. No. 14500	LLPE Cat. No. 12000 FLAT FLANGE	XLPE Cat. No. 12300 FLAT FLANGE	Casing Cat. No. 15000 THICKNESS	Approx. Shipping (wt., lbs.) Tank	w/ Casing
8 x 8 x **8**	**2**	**-0002**	5/32	5/32	3/16	3/32	—	—	3/16	4†	10
14 x 10 x **10**	**6**	**-0005**	5/32	5/32	3/16	3/32	—	—	3/16	7†	16
12 x 12 x **12**	**7**	**-0010**	5/32	5/32	3/16	3/32	—	—	3/16	8†	15
18 x 12 x **12**	**11**	**-0015**	5/32	5/32	3/16	1/8	—	—	3/16	10†	22
24 x 12 x **12***	**15**	**-0020**	5/32	5/32	3/16	1/8	—	—	3/16	13†	33
24 x 24 x **12***	**30**	**-0021**	5/32	5/32	3/16	1/8	—	—	3/16	19†	78
30 x 30 x **12***	**47**	**-0022**	5/32	5/32	1/4	N/A	—	—	3/16	32	67
30 x 24 x **12***	**30**	**-0006**	—	—	—	—	7/32	7/32	3/16	35†	57
48 x 24 x **12***	**50**	**-0011**	—	—	—	—	7/32	7/32	3/16	49	71
18 x 4 x **18**	**6**	**-0030**	5/32	5/32	3/16	N/A	—	—	3/16	8†	20
12 x 12 x **18**	**11**	**-0035**	5/32	5/32	3/16	N/A	—	—	3/16	11†	20
18 x 12 x **18**	**15**	**-0040**	5/32	5/32	3/16	1/8	—	—	3/16	13†	26
18 x 18 x **18**	**25**	**-0042**	5/32	5/32	1/4	N/A	—	—	3/16	18†	36
24 x 12 x **18***	**22**	**-0043**	5/32	5/32	1/4	N/A	—	—	3/16	17†	44
24 x 18 x **18***	**30**	**-0045**	5/32	5/32	1/4	1/8	—	—	3/16	25†	35
30 x 24 x **18***	**50**	**-0016**	—	—	—	—	7/32	7/32	3/16	38	58
48 x 24 x **18***	**75**	**-0023**	—	—	—	—	7/32	7/32	3/16	50-1/2	78
36 x 20 x **20***	**60**	**-0050**	5/32	3/16	1/4	1/8	—	—	3/16	41	76
18 x 12 x **24***	**22**	**-0060**	5/32	5/32	1/4	1/8	—	—	3/16	15†	41
12 x 12 x **24***	**30**	**-0062**	5/32	5/32	1/4	N/A	—	—	3/16	19†	52
24 x 18 x **24***	**45**	**-0065**	5/32	5/32	1/4	1/8	—	—	3/16	24	65
18 x 18 x **24***	**94**	**-0066**	3/16	3/16	5/16	N/A	—	—	3/16	46	85
24 x 12 x **24***	**90**	**-0070**	3/16	3/16	1/4	N/A	—	—	3/16	45	68
24 x 24 x **24***	**60**	**-0025**	—	—	—	—	7/32	7/32	3/16	42	82
30 x 24 x **24***	**70**	**-0031**	—	—	—	—	7/32	7/32	3/16	43	88
48 x 24 x **24***	**105**	**-0036**	—	—	—	—	7/32	7/32	3/16	62	119
24 x 4 x **30***	**12**	**-0075**	1/8	1/8	3/16	N/A	—	—	3/16	17†	25
24 x 8 x **30***	**25**	**-0080**	1/8	1/8	3/16	N/A	—	—	3/16	18†	30
30 x 30 x **30***	**117**	**-0081**	3/16	3/16	5/16	N/A	—	—	3/16	47	98
18 x 18 x **30***	**40**	**-0041**	—	—	—	—	7/32	7/32	3/16	29	71
24 x 18 x **30***	**55**	**-0046**	—	—	—	—	7/32	7/32	3/16	41	84
30 x 24 x **30***	**85**	**-0051**	—	—	—	—	7/32	7/32	3/16	53-1/2	104
30 x 30 x **30***	**115**	**-0055**	—	—	—	—	7/32	7/32	3/16	60	119
48 x 24 x **30***	**135**	**-0061**	—	—	—	—	7/32	7/32	3/16	72	138
44 x 36 x **33****	**220**	**-0067††**	—	—	—	—	5/16	5/16	3/16	120	165
50 x 36 x **33****	**250**	**-0071††**	—	—	—	—	5/16	5/16	3/16	138	213
24 x 24 x **36***	**90**	**-0090**	3/16	3/16	1/4	N/A	—	—	3/16	45	80
30 x 30 x **36***	**140**	**-0091**	3/16	3/16	5/16	N/A	—	—	3/16	50	135
30 x 24 x **36***	**105**	**-0076**	—	—	—	—	7/32	7/32	3/16	65	122
36 x 36 x **36***	**185**	**-0082**	—	—	—	—	7/32	7/32	3/16	98	216
48 x 24 x **36***	**160**	**-0085**	—	—	—	—	7/32	7/32	3/16	76	190
48 x 36 x **36****	**260**	**-0087††**	—	—	—	—	5/16	5/16	3/16	153	263
60 x 24 x **36****	**210**	**-0092††**	—	—	—	—	5/16	5/16	3/16	157	222
72 x 36 x **36****	**375**	**-0095††**	—	—	—	—	5/16	5/16	3/16	194	309
30 x 24 x **48***	**140**	**-0100**	—	—	—	—	7/32	7/32	3/16	73	162
48 x 24 x **48****	**220**	**-0105**	—	—	—	—	7/32	7/32	3/16	93	173
72 x 36 x **48****	**500**	**-0110††**	—	—	—	—	5/16	5/16	3/16	186	386
Maximum Service Temperature			**140°F** 60°C	**140°F** 60°C	**220°F** 104°C	**230°F** 110°C	**140°F** 60°C	**140°F** 60°C			

**Casing recommended* ***Casing required*
†Within UPS size restrictions *††Covers on these tanks are ribbed for structural support. Cross support cannot be cut for hinge installation.*

Cylindrical Tanks

Tapered General Purpose Containers

CAT. NO. 56104

Tapered General Purpose Container—HDPE

- Straight, no-lip flange
- Often used in water treatment
- Rigid and lightweight
- Fits through standard door for portability

Size (gallons)	Size Code	Grad. (gallons)	Nom./Dim. (O.D. x Depth)	Natural Cat. No. 56104	Approx. Shipping (wt., lbs.)
30	**-0030**	5	22 x 22-1/2	3/32	55
50	**-0050**	5	22 x 38-7/8	3/32	80

5 per package.

Closed-Dome Tanks

CAT. NO. 11150

Closed-Dome Tanks

- 6" threaded screw closure with silicone gasket
- 2-inch top bung with buttress thread on HDPE, 2-inch NPS on PP
- Protects contents from contamination and spillage
- Reduces evaporation
- Two mounting flats
- Domed bottom offers good drainage
- Graduations in gallons and liters

Accessories and Options

- Viton closure gasket #620409-0005
- EPDM gasket 311-1509
- Metal stand elevates tanks 22 inches from floor—Cat. No. 19009 (see page 9)
- Many fittings available (see pages 12-13)

Closed-Dome Tanks — Nominal Wall Thickness By Resin

				HDPE	PP	
Size (gallons)	Size Code	Grad. (gal./liter)	Nom./Dim. (O.D. x Depth)	Natural Cat. No. 11150	Natural Cat. No. 11250	Approximate Shipping (wt., lbs.)
20*	**-0020**	1.25/5	16-1/2 x 32	1/4	N/A	17†
30	**-0030**	2.5/10	18-1/2 x 38-5/8	3/16	1/4	20†
55	**-0055**	2.5/10	22 x 43-1/8	1/4	1/4	31
100	**-0100**	10 /50	28-1/2 x 51-1/4	1/4	5/16	60

**Flat sides 180° for fitting placement. No flat on top.*

†Within UPS size restrictions

For stainless steel dolly, see page 19.

Cylindrical Tank Stands

Tank Stands

Sturdy, all-metal stands are available for most Saint-Gobain Performance Plastics cylindrical tanks. These stands feature:

- Welded carbon steel construction
- Chemical-resistant PUR Paint
- Fit tanks with or without FRP casing

Floor Stands

- Used with flat-bottom tanks
- Elevate the mixer to correct height
- Stand partially encircles the tank
- Should be bolted to the floor for stability

Elevated Stands for Flat-Bottom Tanks

- Lift flat-bottom tanks 22 inches
- 8-inch center hole for drain
- 5.5-inch rim cut-out for low side fittings
- Stand should be bolted to the floor
- Available with or without mixer supports

Elevated Stands for Conical-Bottom Tanks

- Conform to the tank's cone angle
- Open at tip to accommodate fittings
- Conical-bottom stands center drain openings are as follows:

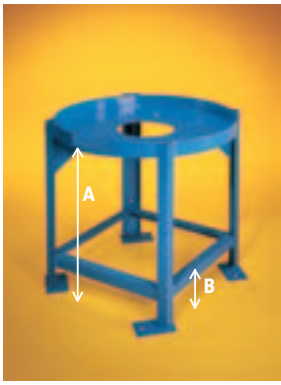
  30 gallon—5 inch;
  55, 100, 150 and 250 gallon—7 inch;
  400 and 500 gallon—8 inch

- Cone tip 18 inches from the floor
- Stand should be bolted to the floor
- Available with or without mixer supports

Options

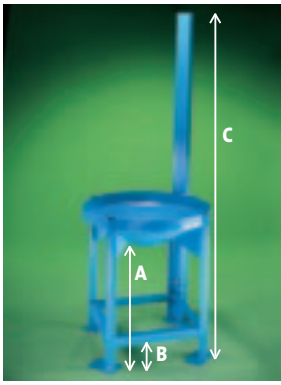
- Casters (S/S or sanitary)
- 304 or 316 S/S construction
- Handles and support ring for mobile stands

FLOOR STAND FOR FLAT-BOTTOM TANK STAND CAT. NO. 20010 (UP TO 1000 GALLONS)



ELEVATED FLAT-BOTTOM TANK STAND CAT. NOS. 19009 AND 19010 (UP TO 1000 GALLONS)

NOTE: Plastic tanks cannot support the weight of a mixer or other equipment. They must be attached to the stand's metal support. NEVER clamp equipment directly to a plastic tank.



ELEVATED CONICAL-BOTTOM TANK STAND CAT. NOS. 17109 AND 17110 (UP TO 500 GALLONS)

Tank Stands — Nominal Dimensions, Inches

			Elevated Stands							
		Floor Stands	Flat-Bottom			Conical-Bottom			Stand Shipping (wt., lbs.)	
Size (gallons)	Stand Size Code	Flat-Bottom Cat. No. 20010 (w/ Support)	Cat. No. 19009 A	Cat. No. 19009 B	Cat. No. 19010 C (w/ support) SUPPORT HEIGHT	Cat. No. 17109 A	Cat. No. 17109 B	Cat. No. 17110 C (w/ support)	Floor	Elevated
10	-0010	N/A	N/A	N/A	N/A	12	3-1/2	N/A	N/A	25
30	-0030	35	22	3-1/2	57	18	3-1/2	56-1/2	17-1/2	85
55	-0055	38	22	3-1/2	61	18	3-1/2	63	20	95
80	-080	48	22	3-1/2	73	N/A	N/A	N/A	23	105
100	-0100	44	22	3-1/2	68	18	3-1/2	64	27-1/2	125
150	-0150	49	22	3-1/2	73	18	3-1/2	78	29	135
200	-0200	51	22	3-1/2	73	N/A	N/A	N/A	32-1/2	150
250	-0250	N/A	N/A	N/A	N/A	18	3-1/2	74	N/A	158
275	-0275	49	22	3-1/2	73	N/A	N/A	N/A	32	182
360	-0360	49	22	3-1/2	73	N/A	N/A	N/A	36	215
400	-0400	N/A	N/A	N/A	N/A	18	3-1/2	73	N/A	265
500	-0500	62	22	3-1/2	84	18	9-1/2	105	43	275
1000	-1000	77	22	3-1/2	100	N/A	N/A	N/A	52-1/2	325

For dimensions of floor pads and bolt holes, contact Saint-Gobain Performance Plastics.

Open-Top Tank Fittings/Accessories

Covers

Floating Covers

Maintain continuous contact as liquid level changes; reduce evaporation, fumes and surface oxidation. Very good chemical resistance. Fit only Saint-Gobain Performance Plastics straight-wall cylindrical tanks (Series 11000, 18000, 19000 and 54000). Resin complies with 21 CFR Reg. 177.1520. Refer to chart on page 2.

Installed Hinges for Saint-Gobain Performance Plastics High-Performance Cylindrical Tank Covers

Flexible PP hinge provides access to cylindrical tanks without completely removing cover. The cover is cut to your specifications. The hinge is installed with stainless steel rivets. Hinge length and exact location must be listed separately on your purchase order.

Stainless steel hinges available upon request.

FLOATING COVER
CAT. NO. 54104

HDPE Floating Covers for Saint-Gobain Performance Plastics Cylindrical Tanks— Nominal Wall Thickness

Fits These Size Tanks (gallons)	Size Code	Diameter (inches)	Floating Cover (thickness, inches)
5	**-0011**	10-3/8	1/16
7.5	**-0012**	12	1/16
10	**-0013**	12-3/4	1/16
15	**-0014**	13-1/8	1/16
30	**-0018**	18-1/8	3/32
55	**-0022**	21-1/2	3/32

These covers do not fit Saint-Gobain tanks Cat. No. 56104.

Installed Hinges for Saint-Gobain Performance Plastics High-Performance Tanks— Nominal Wall Thickness

Hinges available for all open-top vessels.

Fits These Size Tanks (gallons)	Hinges for Covers Cat. No. 87500	Hinge Length (inches)
5 to 80	**-0024**	up to 24
100 to 200	**-2536**	25 to 36
275 and 360	**-3748**	37 to 48
500	**-4960**	49 to 60

Use the size to determine P/N for rectangular tanks. Some rectangular covers have ribs which may limit hinge placement. See page 7 for details.

Sanitary Tanks

Sanitary Conical Tanks

Developed to address the special needs of the pharmaceutical and related industries, Saint-Gobain Performance Plastics Sanitary Process Vessels are manufactured from a special resin that allows the unit to withstand autoclaving. These tanks provide corrosion protection and also prevent metallic contamination. A low-cost alternative to metal, our sanitary tanks also offer complete drainage and a wide assortment of compatible accessories. The units are made to each customer's unique process requirements. Sampling devices, spray jets, mixers, three drainage options, and specified fitting placement are just a few examples of the options available. Typical applications include buffer mixing, media preparations, and small scale production. Modifications can also be made to accommodate special size needs. The units are also completely compatible with Saint-Gobain Performance Plastics hoses, piping systems, and tubing products, helping to maintain Saint-Gobain Performance Plastics' reputation as a worldwide leader in the pharmaceutical, industrial, and life science industries.

SANITARY PROCESSING

SANITARY TANK FAMILY

Closed-Dome Bio Tanks

Closed-Dome Bio Tanks—Polypropylene; Polypropylene Closure

30- TO 100- GALLON SIZE WITH OVERHEAD MIXER SYSTEM

CAT. NO. 2650

Excellent for preparing media components and growing cultures. Closure and gasket material meet the specifications promulgated under the Federal Food, Drug and Cosmetic Act, for use involving contact with food for human consumption. Please refer to the specifications listed in Regulation 21 CFR177.1520(c) 3.1. Flat bottom on 75-liter size is ideal for use with magnetic stir bars. Large, 6-inch gasketed closures make filling and dispensing easy. Molded-in body grips on 75-liter size provide safe, convenient handling. Flat areas on 115- to 380-liter size for easy fitting installation. Molded-in graduations in liter and gallon increments. Individually packaged.

NOTE: An overhead mixer system is also available (Cat. Nos. 2653, 2654) and requires sanitary mixer support (Cat. No. 2651-0200). Installed sanitary fittings are also available. See autoclavable dolly (Cat. No. 2624). **Autoclavable/Graduated/Leakproof.**

Cat. No. 2650	-0020	-0030	-0055	-0100
Capacity, liter; gallons	75; 20	115; 30	210; 55	380; 100
O.D. x Height, mm (nominal)	419 x 813	470 x 981	559 x 1099	724 x 1321
O.D. x Height, in. (nominal)	16-1/2 x 32	18-1/2 x 38-5/8	22 x 43-1/8	28-1/2 x 51-1/4
Wall Thickness, mm; in. (nominal)	6.3; 1/4	6.3; 1/4	6.3; 1/4	7.9; 5/16

Closed-Dome Bio Tank Accessories

Closed-Dome Bio Tank Closure with Mixer Support Assembly—

Polypropylene, PVDF True Union Clamp

An overhead mixer support assembly 2651-0200 for use with all closed-dome bio tanks (Cat. No. 2650) and high-density polyethylene closed-dome tanks (Cat. No. 11150). The unique, sanitary flange assembly allows for overhead mixing in a closed system. Designed specifically for use with Saint-Gobain Performance Plastics BioTech mixing unit (Cat. Nos. 2653, 2654), the assembly consists of a 6-inch PP screw closure with a 2-inch sanitary ferrule welded in the center, a 2-inch silicone gasket, and a true union fitting. Can be connected to other 2-inch sanitary fittings for drain lines and closed system filling. Individually packaged. Autoclavable, but must be kept vertical if assembled with lower assembly (Cat. No. 2654). Autoclavable.

Autoclavable Dolly—Stainless Steel

Designed to move small Saint-Gobain Performance Plastics tanks (up to 30 gallons/115 liters) during daily use or servicing. Do not use for tanks with spigots. Non-corrosive and chemically resistant to acids and bases. Casters won't leave marks on floor. Autoclavable.

Cat. No. 2624 -0020	
Maximum weight limits, lbs.;kg	500; 227.3
I.D. x H, in.; mm	20-1/2 x 6-1/2; 521 x 165

Sanitary Conical Process Vessels

Sanitary Conical Process Vessels

Sanitary Conical-Bottom Process Systems

Specially designed for use in the bio-pharmaceutical market, but suitable for any application where aseptic, sanitary, non-metallic fluid handling is desired. Each tank is manufactured from resins that meet USP Class VI and non-cytotoxic standards and are suitable for use in food and beverage applications. Tanks are available in autoclavable polypropylene (PP) and chemical-resistant polyvinylidene fluoride (PVDF). **Sanitary ferrules installed to customer specifications.** Pre-engineered stands.

Sanitary Conical-Bottom Process Vessels—Polypropylene

- Our polypropylene resin is autoclavable
- Excellent with dilute and strong acids and bases
- Non-cytotoxic standards
- Autoclavable
- USP Class VI
- Silicone gasket and phenolic knobs included
- Fittings and accessories sold separately (see following pages)

Sanitary Conical-Bottom Process Vessels—Polyvinylidene Fluoride (PVDF)

- PVDF resin is extremely pure
- Excellent chemical resistance
- Non-cytotoxic standards
- Fittings sold separately
- Graduated
- PVDF is not autoclavable
- Call to discuss other methods of sterilization

POLYPROPYLENE

Cat. No. 2690	-0030	-0050	-0100	-0200	-0500	-0800	-1400
Nominal Capacity, liter	30	50	100	200	500	800	1400
Brim Capacity, liter	33	55	110	220	550	880	1540
O.D. x Height, with Cover, cm	44.5 x 49.3	55.6 x 49.8	55.6 x 83.6	66.3 x 105.7	91.4 x 131.3	117.6 x 124.5	152.4 x 123.4
O.D. x Height, with Cover, in.	17.5 x 19.6	22 x 19.6	22 x 33	26 x 41.6	36 x 51.7	46.3 x 49	60 x 48.6
Weight, lb.	25	30	35	80	115	157	196

POLYVINYLIDENE FLUORIDE (PVDF)

Cat. No. 2691	-0030	-0050	-0100	-0200	-0500	-0800
Nominal Capacity, liter	30	50	100	200	500	800
Brim Capacity, liter	36	62	115	230	550	880
O.D. x Height, with Cover, cm	44.5 x 49.3	55.6 x 49.8	55.6 x 83.6	66.3 x 105.7	91.4 x 131.3	117.6 x 124.5
O.D. x Height, with Cover, in.	17-1/2 x 18	22 x 21	22 x 25-1/2	26 x 41	36 x 51.7	46.3 x 49
Weight, lb.	40	45	50	105	135	182

These part numbers represent a tank with a solid, bolted, gasketed cover.

Conical Tank Stands

Tank Stands

PORTABLE TANK STAND,
CAT. NO. 2710 W/2690

Portable Tank Stands

- Optimal mobility
- Rounded surfaces for easy cleaning
- Passivated
- Locking casters
- Convenient handgrip
- Casters may be removed

Industrial-Style Stand Option (not shown)

- Lower-cost alternative to the portable cart
- Flat, angled steel construction
- Same size and configuration as shown on page 9
- Options:
  - 304 or 316 stainless steel
  - Sanitary casters
  - Support ring
  - Handles
  - Mixer support

PORTABLE TANK STAND—304 Stainless Steel

Cat. No. 2710	-0030	-0050	-0100	-0200	-0500	-0800	-1400
Fits Tank Size	30 Liters	50 Liters	100 Liters	200 Liters	500 Liters	800 Liters	1400 Liters

PORTABLE TANK STAND—Powder-Coated Stainless Steel (White)

Cat. No. 2711	-0030	-0050	-0100	-0200
Fits Tank Size	30 Liters	50 Liters	100 Liters	200 Liters

Sanitary Tank Mixers

BioTech Mixing Systems

Pre-engineered, ready-to-use mixer packages, Saint-Gobain Performance Plastics BioTech mixer overhead drives and lower assemblies/shafts and impellers have been specially designed to deliver maximum mixing efficiency. Each component has been carefully chosen to match a specific Saint-Gobain Performance Plastics mixing vessel. Use them with the closed-dome bio tanks (Cat. No. 2650) and sanitary conical-bottom processing tanks (Cat. Nos. 2690/2691). Requires 2" sanitary connection (2661-0200) at 10°< (for conical units), 2" silicone gasket (2672-0200) and true union (2670-0200).

Saint-Gobain Performance Plastics vessel and mixer packages are designed for liquids and liquid slurries only. Saint-Gobain does not warrant them for any specific application, only general-purpose mixing up to these maximum limits:

- **Solids**—20% by weight
- **Specific Gravity** (batch)—1.2
- **Viscosity**—500 centipoise

BioTech Mixer Overhead Drives

Overhead drives are available in two power configurations—1/20 Horse Power and 1/8 Horse Power.

Both Drives Feature:

- Autoclavable in-place
- Variable speed controls for better accuracy
- Programmable timers for hands-off control
- LCD readouts for speed, power, torque, impeller flow and time
- Audible overload alarm

1/20 H.P. (Cat. No. 2653-0001)

- 75-liter closed-dome tanks
- 30- and 50-liter sanitary conical-bottom processing tanks

1/8 H.P. (Cat. No. 2653-0002)

- 30-, 50-, and 100 gallon closed-dome tanks
- 100-liter sanitary conical-bottom processing tanks
- 200-liter sanitary conical-bottom processing tanks
- Can be used interchangeably with all sanitary units under 200L.

MIXER OVERHEAD DRIVE
CAT. NO. 2653

LOWER ASSEMBLY/SHAFT
CAT. NO. 2654

Cat. No. 2653	-0001	-0002
Electrical requirements	115V/60 Hz/1 PH	115V/60 Hz/1 PH
Power (W)	40	115
RPM	20-250	20-140
HP	1/20	1/8

Lower module allows for use with 110/220 v, 50/60 Hz and accepts a universally available power cord.

***NOTE:** Lower assemblies/shafts and impellers and mixer support (required for closed-dome tanks only) are necessary to complete each system and are sold separately (see Cat. Nos. 2654 and 2651).*

Lower Assemblies/Shafts and Impellers

- For use with overhead drive
- 316 stainless steel shaft
- 316 stainless steel axial-flow impellers
- Autoclavable
- Encapsulated assemblies available—non-metallic wetted surfaces
- Attaches to 2" connection with true union and gasket

LOWER ASSEMBLIES/SHAFTS AND IMPELLERS

Cat. No.	For Use With	Overhead* Drive Cat. No.	Shaft Length (in., mm)	Shaft Diameter (in., mm)	Impeller Diameter (in., mm)	Impeller Material
2654-0030†	30-gallon closed-dome bio tank (2650-0030)	2653-0002	30; 762	1/2; 13	6.8; 173	Stainless Steel
2654-0031	30- and 50-L sanitary conical tanks (2690/2691-0030, -0050)	2653-0001	17; 432	1/2; 13	6.1; 155	Stainless Steel
2654-0055†	55-gallon closed-dome bio tank (2650-0055)	2653-0002	32; 813	1/2; 13	8.8; 224	Stainless Steel
2654-0075†	75-L closed-dome tank (2650-0020)	2653-0001	23; 584	1/2; 13	6.3; 160	Stainless Steel
2654-0101	100-L sanitary conical tank (2690/2691-0100)	2653-0002	28; 711	1/2; 13	6.1; 155	Stainless Steel
2654-0100†	100-gallon closed-dome bio tank (2650-0100)	2653-0002	38; 965	1/2; 13	10; 254	Stainless Steel
2654-0201	200-L sanitary conical tank (2690/2691-0200)	2653-0002	36; 914	1/2; 13	8.8; 225	Stainless Steel

** The 2653-0002 is appropriate for use with all tanks.* *†Requires mixer support (2651-0200).*

Putting It All Together

Sanitary Process Vessel

pages 19-21

Sanitary Mixers

Fittings

Portable Conical-Bottom Tank Stand

Sanitary stands, page 21

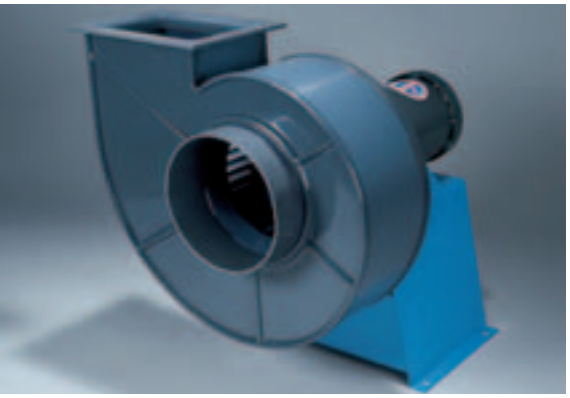
Drain Valve

Accessories

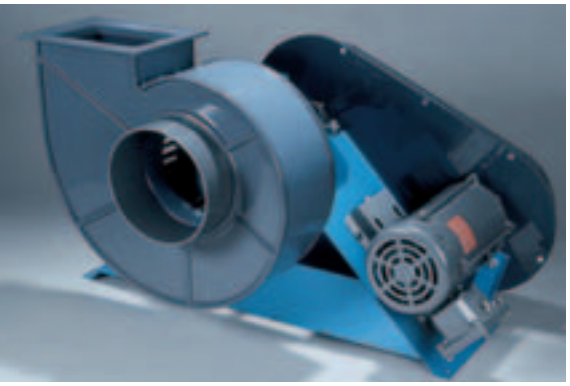
Blowers for Lab and Industrial Use

Reliable, All-Plastic Corrosion-Resistant Units

LAB-STYLE BLOWER



DIRECT DRIVE UNIT



BELT DRIVE UNIT

Saint-Gobain Performance Plastics' Norton® Blowers are excellent choices for aggressive applications where metal blowers quickly corrode. Metal blowers rely on protective coatings, which develop pin holes and pores. Corrosive vapors seep through and attack the metal, causing failure. Plastic blowers last much longer because the material is inherently resistant to corrosion.

The smaller laboratory units have round inlets and outlets. They are designed for use in lab hoods and cabinets. They are available in direct drive with 2 motor options and 2 wheel options.

The industrial units have round inlets and square outlets and offer much greater capacity.

They are proven performers in tough industrial applications, such as metal finishing, chemical manufacturing, wastewater treatment, and chemical storage cabinets. In addition to the options for drives, motors, and wheels, a full line of transitions and flexible connectors is available for connection to ductwork.

Norton blowers are ordered by selecting the right capacity, type of drive, motor and combination of plastic materials for your application. The "Four Steps to Blower Selection" on the following pages will guide you.

Blower Features

- Corrosion resistant
- Outlasts metal
- Quiet operation
- Choice of motors/materials
- Reinforced housing
- For indoor and outdoor† use
- Plastic transitions for easy attachment to standard ducting
- Full line of replacement parts

If installing your own motor, note that Norton blowers must not exceed the stated RPM of each blower (pages 40-42).

Industrial blowers feature round inlets and rectangular outlets. (For plastic transitions, see page 44)

NOTE: Blowers are supplied fully assembled in counterclockwise upblast position. Other counterclockwise positions are available on request.*

†Protect motors and drives against weather when blowers are roof-mounted. All outdoor vertical blower discharge ducts must have weather hoods.

**Except Cat. No. 71300 Series Lab Blower—no bottom horizontal or down-blast positions.*

Blower Performance Curves

Performance Curves for Belt-Drive Blowers

Saint-Gobain Performance Plastics belt-drive blowers are supplied with a 1:1 speed ratio. If you intend to change your blower's speed/capacity after installation, see the instructions supplied with all Saint-Gobain Performance Plastics belt-drive blowers.

- Solid black lines show performance of 1:1 belt-drive blowers.
- Broken black lines show belt-drive blower performance when speed-reducing sheaves are installed by customer.
- Color shows area of most efficient blower operation.

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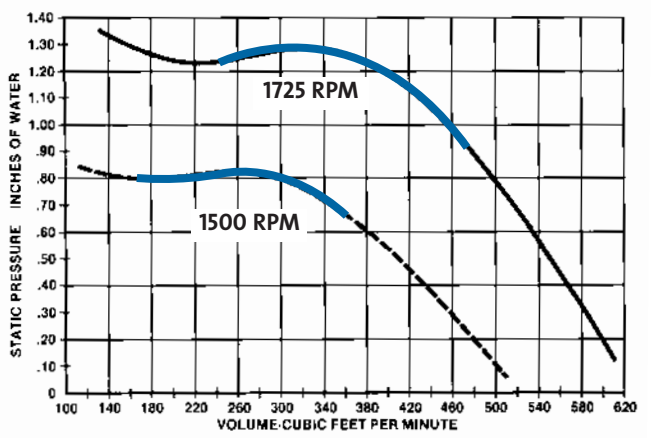

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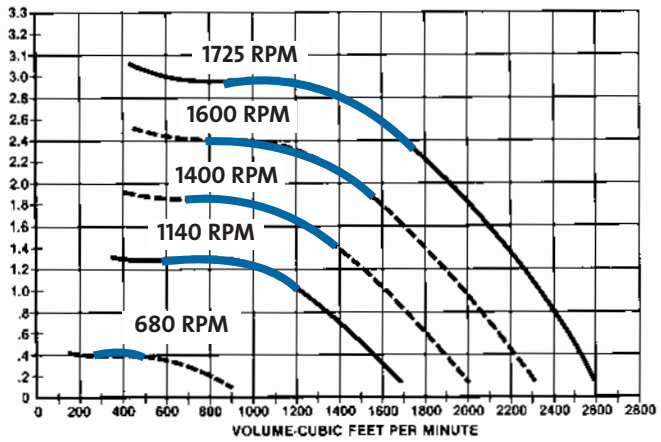

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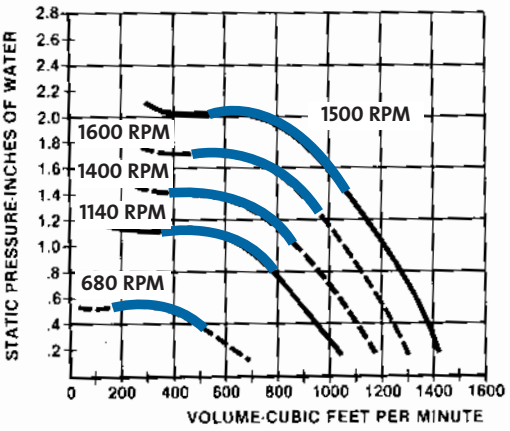

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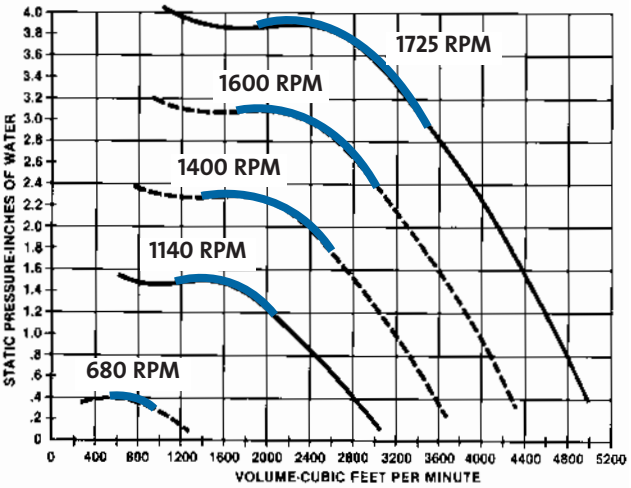

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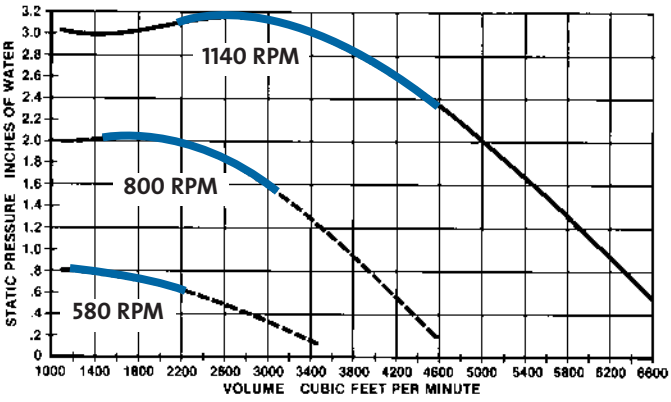
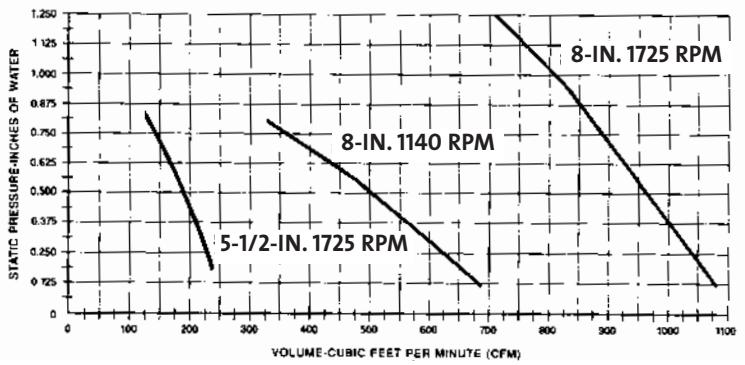


NOTE: Saint-Gobain Performance Plastics blowers must not exceed 1725 rpm (1140 rpm on Size Code -0400)

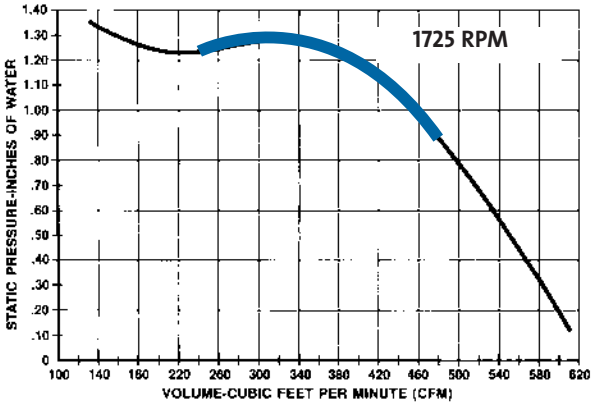
Blower Performance Curves

Lab Blowers

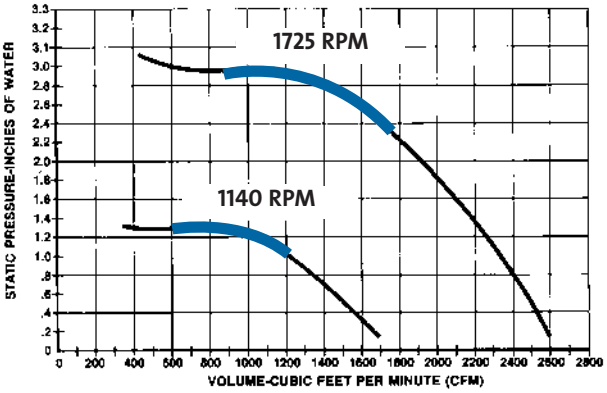


Industrial Blowers

Size Code -0160



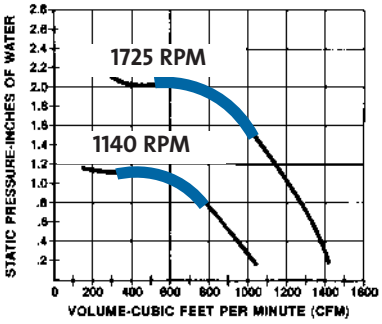
Size Code -0250



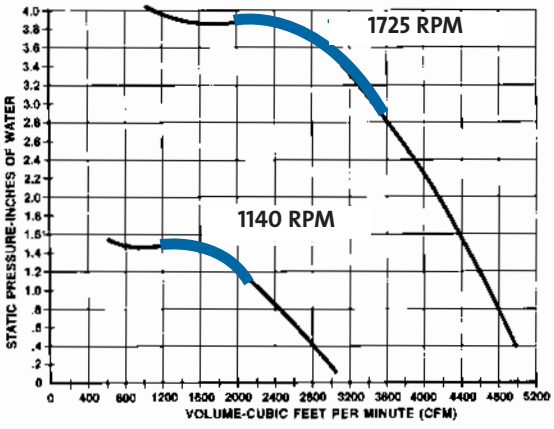
Solid black lines show performance of 1:1 belt-drive blowers.

Color shows area of most efficient blower operation.

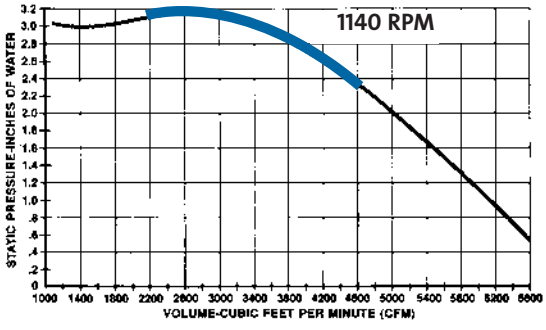
Size Code -0200



Size Code -0310



Size Code -0400



Blower Selection

Four Steps to Blower Selection

1. Determine Air Flow and Static Pressure

Air Flow is measured in CFM, or Cubic Feet per Minute, and represents the volume of the area to be ventilated in one minute.

Static Pressure is measured in inches of water. It is the total resistance to incoming air flow from ducts, fittings, elbows, dampers, and other factors.

You can determine your existing unit's capacity by checking the size and performance specs. For new installations, the CFM and Static Pressure should be determined by a mechanical engineer, HVAC contractor, ductwork manufacturer or other professional.

All our blowers are 60Hz.

2. Select Direct or Belt Drive (if needed)

Some size blowers are only available in direct drive. Others can be belt driven as an option. Consult page 35 for availability.

Direct Drive	Belt Drive
More compact	Field adjustable to vary capacity
Single speed	Flexible to process changes
Fewer moving parts	Reduces stress on motor bearings
No field adjustment	Economical in changing environments

3. Motor Selection

Motor Type	Features	Applications
Totally Enclosed Fan-Cooled (TEFC)	Housings have no direct openings Internal fan cools motor Insulated	Corrosive vapors Dirty, damp or oily service
Explosion Proof (XP)	UL-approved motor* Insulated	Forward curve blades

** UL and CSA for Class I, Group D or Class II, Group F and G.*

4. Material Selection of Wheel

The wheel's chemical resistance takes priority because it is under centrifugal stress.

PVC	Polypropylene
Good chemical resistance	Very good general chemical resistance
Best at room temperature	Withstands higher temperatures, stresses
Low cost	Potentially explosive fumes or dust

GENERAL NOTES: Lab Blowers (sizes codes -0050 to -0150) have round inlets and outlets.
Industrial blowers have round inlets and rectangular outlets (see dimension charts).
All blowers used outdoors must be protected against weather.
Blowers are supplied in counter-clockwise up-blast position. Other positions may be requested.

Blower Specifications

Lab Blower Specifications

These charts are arranged by increasing CFM. All lab blowers are 60Hz.

See the preceding "Four Steps To Blower Selection."

140 to 225 CFM — 3/4 to 1/4 inch Static Pressure

SIZE CODES -0050/0075

Drive	Motor Enclosure	Material Wheel/Housing	Replacement* Parts	RPM	HP	Power Voltage (Phase)	Approx. Shipping (wt., lbs.)	Cat. No. and Size Codes
Dir.	XP	PP/PVC	1	1725	1/6	115 (1)	51†	**71320-0075**
Dir.	TEFC	PP/PVC	1	1725	1/6	115/208-230 (1)	31†	**71330-0050**

360 to 625 CFM — 3/4 to 1/4 inch Static Pressure

SIZE CODES -0050/0075

Drive	Motor Enclosure	Material Wheel/Housing	Replacement* Parts	RPM	HP	Power Voltage (Phase)	Approx. Shipping (wt., lbs.)	Cat. No. and Size Codes
Dir.	XP	PP/FRP	2	1140	1/3	115/230 (1)	60†	**71420-0075**
Dir.	TEFC	PP/FRP	2	1140	1/3	115/208-230 (1)	60†	**71430-0050**
Dir.	XP	PVC/FRP	4	1140	1/3	115/230 (1)	60†	**71520-0075**
Dir.	TEFC	PVC/FRP	3	1140	1/3	115/208-230 (1)	60†	**71530-0050**

710 to 1,025 CFM — 1-1/4 to 1/4 inch Static Pressure

SIZE CODES -0100/0150

Drive	Motor Enclosure	Material Wheel/Housing	Replacement* Parts	RPM	HP	Power Voltage (Phase)	Approx. Shipping (wt., lbs.)	Cat. No. and Size Codes
Dir.	XP	PP/FRP	2	1725	1/3	115/230 (1)	60†	**71420-0150**
Dir.	TEFC	PP/FRP	2	1725	1/3	115/208-230 (1)	60†	**71430-0100**
Dir.	XP	PVC/FRP	3	1725	1/3	115/230 (1)	60†	**71520-0150**
Dir.	TEFC	PVC/FRP	3	1725	1/3	115/208-230 (1)	60†	**71530-0100**

Industrial Blower Specifications

These charts are arranged by increasing CFM. All lab blowers are 60Hz.

All industrial blowers have round inlets and rectangular outlets. See dimension charts later in this section for details.
Plastic transitions are available to connect blowers to ductwork; refer to the last page in this section.

355 to 500 CFM — 1-1/4 to 3/4 inch Static Pressure

SIZE CODES -0160

Drive	Motor Enclosure	Material Wheel/Housing	Replacement* Parts	RPM	HP	Power Voltage (Phase)	Approx. Shipping (wt., lbs.)	Cat. No. and Size Codes
Dir.	XP	PP/PVC	5	1725	1/3	208-230/460 (3)	58	**72521-0160**
Dir.	TEFC	PP/PVC	5	1725	1/3	208-230/460 (3)	60	**72531-0160**
Dir.	XP	PVC/PVC	6	1725	1/3	208-230/460 (3)	58	**72621-0160**
Dir.	TEFC	PVC/PVC	6	1725	1/3	208-230/460 (3)	60	**72631-0160**
Belt	XP	PP/PVC	5	1725	1/3	208-230/460 (3)	135	**72721-0160**
Belt	TEFC	PP/PVC	5	1725	1/3	208-230/460 (3)	130	**72731-0160**
Belt	XP	PVC/PVC	6	1725	1/3	208-230/460 (3)	137	**72821-0160**
Belt	TEFC	PVC/PVC	6	1725	1/3	208-230/460 (3)	132	**72831-0160**

Blower Specifications

Industrial Blower Specifications

These charts are arranged by increasing CFM. All blowers are 60Hz.

650 to 800 CFM — 1 to 3/4 inch Static Pressure

SIZE CODES -0200

Drive	Motor Enclosure	Material Wheel/Housing	Replacement* Parts	RPM	HP	Power Voltage (Phase)	Approx. Shipping (wt., lbs.)	Cat. No. and Size Codes
Dir.	XP	PP/PVC	7	1140	3/4	208-230/460 (3)	125	**72520-0200**
Dir.	TEFC	PP/PVC	7	1140	3/4	208-230/460 (3)	113	**72530-0200**
Dir.	XP	PVC/PVC	8	1140	3/4	208-230/460 (3)	128	**72620-0200**
Dir.	TEFC	PVC/PVC	8	1140	3/4	208-230/460 (3)	116	**72630-0200**

730 to 1,100 CFM — 2 to 1-1/4 inch Static Pressure

SIZE CODES -0200

Drive	Motor Enclosure	Material Wheel/Housing	Replacement* Parts	RPM	HP	Power Voltage (Phase)	Approx. Shipping (wt., lbs.)	Cat. No. and Size Codes
Dir.	XP	PP/PVC	7	1725	3/4	208-230/460 (3)	128	**72521-0200**
Dir.	TEFC	PP/PVC	7	1725	3/4	208-230/460 (3)	122	**72531-0200**
Dir.	XP	PVC/PVC	8	1725	3/4	208-230/460 (3)	116	**72621-0200**
Dir.	TEFC	PVC/PVC	8	1725	3/4	208-230/460 (3)	116	**72631-0200**
Belt	XP	PP/PVC	7	1725	3/4	208-230/460 (3)	138	**72721-0200**
Belt	TEFC	PP/PVC	7	1725	3/4	208-230/460 (3)	138	**72731-0200**
Belt	XP	PVC/PVC	8	1725	3/4	208-230/460 (3)	140	**72821-0200**
Belt	TEFC	PVC/PVC	8	1725	3/4	208-230/460 (3)	150	**72831-0200**

960 to 1,210 CFM — 1-1/4 to 1 inch Static Pressure

SIZE CODES -0250

Drive	Motor Enclosure	Material Wheel/Housing	Replacement* Parts	RPM	HP	Power Voltage (Phase)	Approx. Shipping (wt., lbs.)	Cat. No. and Size Codes
Dir.	XP	PP/PVC	9	1140	1	230-460 (3)	135	**72520-0250**
Dir.	TEFC	PP/PVC	9	1140	1	208-230/460 (3)	122	**72530-0250**
Dir.	XP	PVC/PVC	10	1140	1	230-460 (3)	138	**72620-0250**
Dir.	TEFC	PVC/PVC	10	1140	1	208-230/460 (3)	125	**72630-0250**

1,110 to 1,910 CFM — 3 to 2 inch Static Pressure

SIZE CODES -0250

Drive	Motor Enclosure	Material Wheel/Housing	Replacement* Parts	RPM	HP	Power Voltage (Phase)	Approx. Shipping (wt., lbs.)	Cat. No. and Size Codes
Dir.	XP	PP/PVC	9	1725	1-1/2	208-230/460 (3)	140	**72521-0250**
Dir.	TEFC	PP/PVC	9	1725	1-1/2	208-230/460 (3)	124	**72531-0250**
Dir.	XP	PVC/PVC	10	1725	1-1/2	208-230/460 (3)	140	**72621-0250**
Dir.	TEFC	PVC/PVC	10	1725	1-1/2	208-230/460 (3)	130	**72631-0250**
Belt	XP	PP/PVC	9	1725	1-1/2	208-230/460 (3)	160	**72721-0250**
Belt	TEFC	PP/PVC	9	1725	1-1/2	208-230/460 (3)	155	**72731-0250**
Belt	XP	PVC/PVC	10	1725	1-1/2	208-230/460 (3)	220	**72821-0250**
Belt	TEFC	PVC/PVC	10	1725	1-1/2	208-230/460 (3)	190	**72831-0250**

Blower Specifications

Industrial Blower Specifications

These charts are arranged by increasing CFM. All blowers are 60Hz.

1,410 to 2,210 CFM — 1-1/4 to 1 inch Static Pressure

SIZE CODES -0310

Drive	Motor Enclosure	Material Wheel/Housing	Replacement* Parts	RPM	HP	Power Voltage (Phase)	Approx. Shipping (wt., lbs.)	Cat. No. and Size Codes
Dir.	XP	PP/PVC	11	1140	2	230/460 (3)	260	**72520-0310**
Dir.	TEFC	PP/PVC	11	1140	2	208-230/460 (3)	162	**72530-0310**
Dir.	XP	PVC/PVC	12	1140	2	230/460 (3)	195	**72620-0310**
Dir.	TEFC	PVC/PVC	12	1140	2	208-230/460 (3)	206	**72630-0310**

2,900 to 3,640 CFM — 3-1/4 to 2-3/4 inch Static Pressure

SIZE CODES -0310

Drive	Motor Enclosure	Material Wheel/Housing	Replacement* Parts	RPM	HP	Power Voltage (Phase)	Approx. Shipping (wt., lbs.)	Cat. No. and Size Codes
Dir.	XP	PP/PVC	11	1725	5	30/460 (3)	220	**72521-0310**
Dir.	TEFC	PP/PVC	11	1725	5	208-230/460 (3)	152	**72531-0310**
Dir.	XP	PVC/PVC	12	1725	5	230/460 (3)	225	**72621-0310**
Dir.	TEFC	PVC/PVC	12	1725	5	208-230/460 (3)	172	**72631-0310**
Belt	XP	PP/PVC	11	1725	5	230/460 (3)	277	**72721-0310**
Belt	TEFC	PP/PVC	11	1725	5	208-230/460 (3)	237	**72731-0310**
Belt	XP	PVC/PVC	12	1725	5	230/460 (3)	283	**72821-0310**
Belt	TEFC	PVC/PVC	12	1725	5	208-230/460 (3)	284	**72831-0310**

3,350 to 5,000 CFM — 3 to 2 inch Static Pressure

SIZE CODES -0400

Drive	Motor Enclosure	Material Wheel/Housing	Replacement* Parts	RPM	HP	Power Voltage (Phase)	Approx. Shipping (wt., lbs.)	Cat. No. and Size Codes
Dir.	XP	PP/PVC	13	1140	5	230-460 (3)	270	**72520-0400**
Dir.	TEFC	PP/PVC	13	1140	5	208-230/460 (3)	285	**72530-0400**
Dir.	XP	PVC/PVC	14	1140	5	230-460 (3)	300	**72620-0400**
Dir.	TEFC	PVC/PVC	14	1140	5	208-230/460 (3)	295	**72630-0400**
Belt	TEFC	PP/PVC	13	1140	5	208-230/460 (3)	370	**72730-0400**
Belt	TEFC	PVC/PVC	14	1140	5	208-230/460 (3)	380	**72830-0400**

COMMON REPLACEMENT PARTS

Match the replacement part number with the required item below.

Call Saint-Gobain Performance Plastics for pricing on any housing, back plate or gasket.

Replacement No.	PVC Wheel	PP Wheel	Shaft Extension	Housing	Back Plate	Gasket
1	—	71309-0002	71309-0035	71309-0004	—	—
2	—	71409-0002	71409-0035/ 71409-0034*	71409-0031	—	—
3	71509-0003	—	Included	71409-0031	—	—
4	71509-0004	—	Included	71409-0031	—	—
5	—	72509-0160	Included	72509-0011	72509-0016	72509-0038
6	72609-0160	—	Included	72509-0011	72509-0016	72509-0038
7	—	72509-0200	Included	72509-0012	72509-0017	72509-0039
8	72609-0200	—	Included	72509-0012	72509-0017	72509-0039
9†	—	72509-0250** 72529-0250†	Included	72509-0013	72509-0018	72509-0040
10	72609-0250** 72629-0250†	—	Included	72509-0013	72509-0018	72509-0040
11	—	72509-0310	Included	72509-0014	72509-0019	72509-0041
12	72609-0310	—	Included	72509-0014	72509-0019	72509-0041
13	—	72509-0400	Included	72509-0015	72509-0020	72509-0042
14	72609-0400	—	Included	72509-0015	72509-0020	72509-0042

**The shaft extension of the 71420-0150 blower was redesigned in 1986. For blowers up to and including serial number 71E463109, order shaft extension 71409-0034. For blowers with higher serial numbers, order shaft extension 71409-0035.*

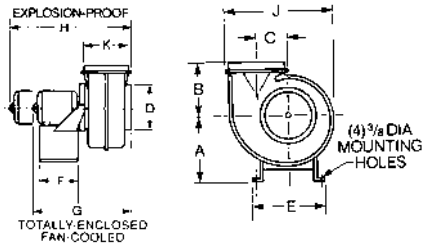
†For blowers up to and including serial number 72E56243—will accept a motor with 0.625 diameter shaft.

***For serial numbers above 72E56243—will accept a motor with 0.875 diameter shaft.*

Blower Specifications

LAB BLOWER—Dimensions (Inches)

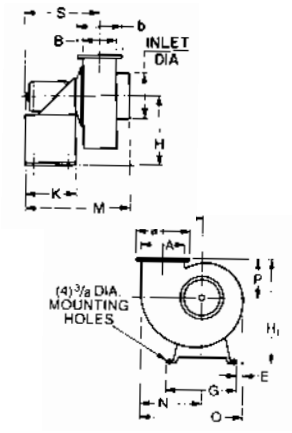
Cat. No.	A	B	C	D	E	F	G	H	J	K
71330-0050	5-5/8	6-5/8	3-3/4	5-5/8	9	7	14-1/2	—	11	4-1/2
71320-0075	5-5/8	6-5/8	3-3/4	5-5/8	9	7	—	15-1/2	11	4-1/2
71430-, 71530-0050	9-1/2	7-1/4	4-1/2	8	10-1/2	7-1/4	19	—	15-1/8	8
71420-, 71520-0075	9-1/2	7-1/4	4-1/2	8	10-1/2	7-1/4	—	19-1/2	15-1/8	8
71430-, 71530-0100	9-1/2	7-1/4	4-1/2	8	10-1/2	7-1/4	18-1/2	—	15-1/8	8
71420-, 71520-0150	9-1/2	7-1/4	4-1/2	8	10-1/2	7-1/4	—	21-1/2	15-1/8	8



INDUSTRIAL BLOWERS WITH DIRECT DRIVE—Dimensions (Inches)

Cat. No.	Size Code	INLET DIAMETER, IN. I.D.	O.D.	A	B	E	G	H	H1	K
72520, 72521	-0160	6-1/4	6-5/8	6	4-9/16	1/2	13-1/4	10	15-11/16	10
72530, 72531	-0200	7-3/8	7-3/4	7-7/16	5-1/8	1/2	14-1/2	14	21-11/16	10
72620, 72621	-0250	9-3/8	9-3/4	9-3/8	6-11/16	1/2	15-3/4	15-15/16	24-3/16	11-1/2
72630, 72631	-0310	12-3/8	12-3/4	11-7/8	9-11/16	1/2	17-1/4	20-15/16	31-9/16	13-1/2
	-0400	15-5/8	16	15-5/8	11-7/8	3/4	23	23-3/4	35-15/16	18

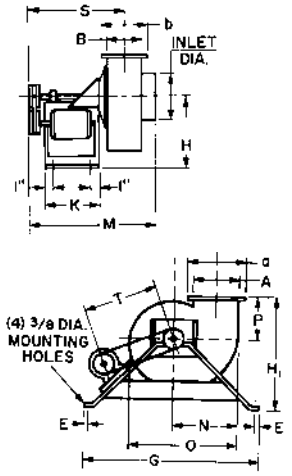
Cat. No.	Size Code	M	N	O	P	R	S	a	b
72520, 72521	-0160	16-1/2	9-1/16	15-3/8	5-11/16	5-13/16	12-3/8	8	6-9/16
72530, 72531	-0200	20-3/8	11-11/16	19-9/16	7-11/16	7-1/2	14-1/2	10-1/16	7-5/8
72620, 72621	-0250	24-1/4	13-9/16	22-13/16	8-1/4	8-7/16	16-5/8	11-7/8	9-3/16
72630, 72631	-0310	29-3/4	18-1/8	29-15/16	10-5/8	11-5/8	20-5/16	14-3/8	12-3/16
	-0400	39-3/4	22-7/16	36-13/16	12-3/16	13-9/16	24	18-3/8	14-5/8



INDUSTRIAL BLOWERS WITH BELT DRIVE—Dimensions (Inches)

Cat. No.	Size Code	INLET DIA., IN. I.D.	A	B	E	G	H	H1	K	M
72721, 72730	-0160	6-5/8	6	4-9/16	1/2	32-1/2	10	15-11/16	10	22-1/4
72731, 72821	-0200	7-3/4	7-7/16	5-1/8	1/2	32-1/2	14	21-11/16	10	22-1/4
72830, 72831	-0250	9-3/4	9-3/8	6-11/16	1/2	37-1/4	15-15/16	24-3/16	11-1/2	26-3/4
	-0310	12-3/4	11-7/8	9-11/16	1/2	46-13/16	20-15/16	31-9/16	13-1/2	32-1/4
	-0400	16	15-5/8	11-7/8	3/4	54-9/16	23-3/4	35-15/16	18	41-7/8

Cat. No.	Size Code	N	O	P	R	S	T	a	b
72721, 72730	-0160	9-1/16	15-3/8	5-11/16	5-13/16	16-3/8	14-7/8 +/- 1-1/2	8	6-9/16
72731, 72821	-0200	11-11/16	19-9/16	7-11/16	7-1/2	16-3/8	14-7/8 +/- 1-1/2	10-1/16	7-5/8
72830, 72831	-0250	13-9/16	22-13/16	8-1/4	8-7/16	19-1/8	16 +/- 1-1/2	11-7/8	9-3/16
	-0310	18-1/8	29-15/16	10-5/8	11-5/8	22-13/16	20-1/2 +/- 1-1/2	14-3/8	12-3/16
	-0400	22-7/16	36-13/16	12-3/16	13-9/16	26-1/8	22-7/8 +/- 1-1/2	18-3/8	14-5/8



**Size codes for these blowers are available with all catalog numbers.*

PVC DUCT TO BLOWER CONNECTION

You may attach PVC duct to the blower inlet and transition, or use the Saint-Gobain flexible connection.

INLET

Lab	INLET I.D. x O.D., IN.	Standard Duct Size IN.	Type of Duct Joint
71300 Series	5-1/4 x 5-5/8	5	Butts
71400 and 71500 Series	Taper x 8	8	Ducts slides over
Industrial	**INLET I.D. x O.D., IN.**	**Standard Duct Size IN.**	**Type of Duct Joint**
-0160	6-1/4 x 6-5/8	6	Butts
-0200	7-3/8 x 7-3/4	7	Ducts inserts
-0250	9-3/8 x 9-3/4	9	Ducts inserts
-0310	12-3/8 x 12-3/4	12	Butts
-0400	15-5/8 x 16	16	Butts

OUTLET

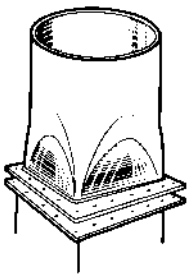
Lab	OUTLET I.D. x O.D., IN.	Standard Duct Size IN.	Type of Duct Joint
71300 Series	4 x 4-1/2	4	Butts
71400 and 71500 Series	Taper x 8	8	Ducts slides over
Industrial	**OUTLET I.D. x O.D., IN.**	**Standard Duct Size IN.**	**Type of Duct Joint**
-0160	6-1/4 x 6-5/8	6	Butts
-0200	8-1/4 x 8-5/8	8	Butts
-0250	10-3/8 x 10-3/4	10	Butts
-0310	13-5/8 x 14	14	Butts
-0400	15-5/8 x 16	16	Butts

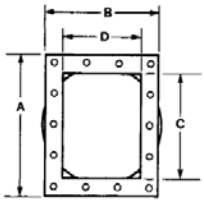
Dir. = Direct Drive XP = Explosion-Proof TEFC = Totally Enclosed Fan-Cooled BELT = Belt Drive

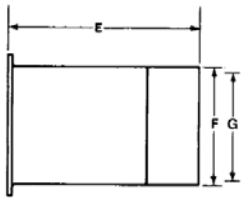
Blower Specifications

Transitions for Saint-Gobain Performance Plastics Industrial Blowers

- Connect rectangular blower outlet to circular ductwork
- Permits fast, easy installation
- Rigid, welded PVC
- Flanges are drilled for blowers' bolt patterns







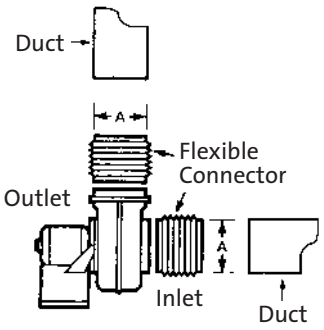
Cat. No.	Size Code	A	B	C	D	E	F Duct O.D.	G Duct I.D.	Bolt Holes
72510 Fits Saint-Gobain industrial blowers with these size codes	**-0160**	8	6-9/16	5-7/8	4-3/8	11	6-5/8	6-1/4	14
	-0200	10-1/16	7-5/8	7-11/16	5-5/16	11	8-5/8	8-1/4	18
	-0250	11-7/8	9-3/16	9-1/2	6-3/4	12	10-3/4	10-3/8	22
	-0310	14-3/8	12-3/16	11-3/16	9-5/8	12	14	13-5/8	22
	-0400	18-3/8	14-5/8	15-3/4	12	13	16	15-5/8	22

Transitions for Saint-Gobain Industrial Blowers

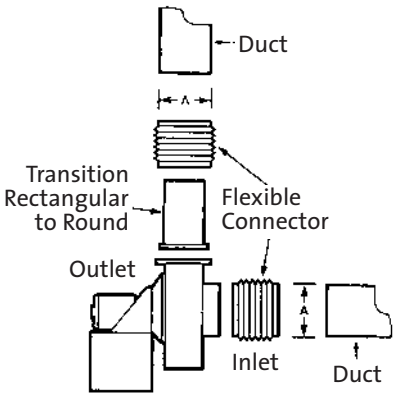
- Easily fit inlets and outlets of laboratory blowers
- Stainless steel clamps (two) supplied for quick, easy installation
- Flexible PVC reduces excess vibration
- 6" Length

Connector Cat. No.	"A"—I.D. (Inches)	Connector Fits
72511-0050	4-1/2	5-inch lab blower (outlet)
72511-0055	5-5/8	5-inch lab blower (inlet)
72511-0100	8	8-inch lab blower (inlet and outlet)
72511-0160	6-5/8	-0160 industrial blower (inlet and transition)
72511-0200	7-3/4	-0200 industrial blower (inlet)
72511-0205	8-5/8	-0200 industrial blower (transition)
72511-0250	9-3/4	-0250 industrial blower (inlet)
72511-0255	10-3/4	-0250 industrial blower (transition)
72511-0310	12-3/4	-0310 industrial blower (inlet)
72511-0315	14	-0310 industrial blower (transition)
72511-0400	16	-0400 industrial blower (inlet and transition)

**Transitions are needed to convert the rectangular industrial blower outlet to a round duct. Must be ordered separately (Cat. No. 72510).*



Lab Blower



Industrial Blower

Technical Information

Food Grade Resins

The resins used in Saint-Gobain Performance Plastics low-density and high-density polyethylene tanks comply with 21 CFR Regulation 177.1520. These tanks may be used with the following kinds of food products:

- Nonacid, aqueous products; may contain salt or sugar or both (pH above 5.0)
- Dairy products and modifications: oil-in-water emulsions, high or low fat
- Moist bakery products with surface containing no free fat or oil
- Dry solids with the surface containing no free fat or oil (no end-test required) and under all conditions of use as described in Table 2 of 21 CFR Regulation 177.1520 except for condition A—high-temperature heat sterilization (e.g., over 100°C)

Saint-Gobain Performance Plastics rotomolded polypropylene complies with 21 CFR 177.1520 (c) 3.1 Regulation. The resin used in Saint-Gobain PVDF tanks complies with 21 CFR Regulation 177.2510.

Plastic Products for Biotechnology

Knowing whether a plastic is toxic to cell cultures is critical to biotechnology production. To test cytotoxicity, we submitted representative molded resin samples to an independent laboratory.

Samples were evaluated utilizing an MEM Elution Procedure, utilizing a W.I. 38 or MRC-5 cell line. This is a standard cytotoxicity test for pharmaceutical, medical devices and ophthalmic products (though it typically utilizes an L929 cell line.)

Dimensions and Wall Thickness

Dimensional information contained in this catalog is for reference only, for the purpose of selecting product from the catalog. **There is no inference to tolerances for the listed approximate dimensions. For additional information, contact Saint-Gobain Performance Plastics.**

Physical Service Capabilities

Maximum service temperature listings refer to temperatures that should not be exceeded for the materials utilized in the specific product line. Many factors, such as chemical resistance, specific gravity, external stresses, product geometry, environment and many others affect the suitability of a particular product. For additional information, contact Saint-Gobain Performance Plastics.

Environmental Stress-Cracking

Environmental stress-cracking is the failure of a plastic material in the presence of certain types of chemicals. This failure is not a result of chemical attack. Simultaneous presence of three factors causes stress-cracking:

- Tensile stress
- A stress-cracking agent
- Inherent susceptibility of the plastic to stress-cracking

Tensile Stresses

These are set up during some molding and fabrication processes. Environmental conditions can add tensile stress, particularly if the tank is inadequately supported. Rotational molding creates parts that are virtually stress-free, so rotomolded tanks are less subject to environmental stress-cracking than fabricated tanks. Use of an FRP casing will minimize tensile stress from added load and further decrease the likelihood of environmental stress-cracking.

Common Stress-Cracking Agents

Detergents, surface active chemicals, lubricants, oils, ultra-pure water and plating additives such as brightener and wetting agents.

Relatively small concentrations of stress-cracking agent may be sufficient to cause cracking. (Stress cracking agents are identified in the Chemical Resistance Chart.)

Susceptibility to Stress-Cracking

This varies from plastic to plastic depending on several characteristics of the molecular structure. Cross-linked high-density polyethylene is inherently more resistant to stress-cracking than either low- or high-density polyethylene. PVDF also has excellent stress-crack resistance.

Physical Service Capabilities

Prolonged use of a plastic tank at temperatures above ambient will shorten tank life. Temperature effects are directly dependent on the characteristics of the plastic resin, specific gravity of tank contents, tank size and configuration, exterior support, and wall thickness of the tank.

Temperature cycling will shorten tank life. The impact resistance of most rotomolded tanks declines at low temperatures. Cross-linked high-density polyethylene retains much of its impact resistance in low temperature applications.

Ultraviolet (UV) Stabilization

Plastics are attacked and deteriorate when exposed to direct sunlight. When plastic tanks absorb the sun's ultraviolet light, the UV energy excites the polymers' chains, causing them to break. The effects are discoloration, embrittlement and eventual cracking. Elevated temperatures and oxygen tend to accelerate the deterioration. Those Saint-Gobain Performance Plastics tanks listed as suitable for outdoor service are protected from UV attack by: coloring or pigmenting and/or adding internal stabilizers which preferentially absorb or dissipate the UV energy. Shading tanks from the sun will also prevent deterioration.

Tanks must be free to expand or contract; avoid excessive tension on the tank.

Resins Non-Toxic to Cell Cultures

Contact Saint-Gobain for details, 800-451-0770.

Resin	Color	Product
High-Density Polyethylene (HDPE)	Natural	Tanks
Low-Density Polyethylene (LDPE)	Natural	Tanks
Polypropylene (PP)	Natural	Tanks
Polyvinylidene Fluoride (PVDF)	Natural	Tanks

Chemical Resistance

Description	% Conc.	LLDPE/LDPE/HDPE 70°F	LLDPE/LDPE/HDPE 140°F	XLPE1 70°F	XLPE1 140°F	PP 70°F	PP 140°F	PVDF 70°F	PVDF 140°F	FRP 70°F	FRP 140°F	PVC 70°F	PVC 140°F	EPDM 70°F	NEOPRENE 70°F	VITON® 70°F	316 STAINLESS 70°F
Acetaldehyde*	40	U	U	U	U	U	U	U	U	U	U	U	U	S	U	U	S
Acetamide		—	—	—	—	S	U	S	U	–	–	–	–	S	S	S	S
Acetic Acid*/**	1-79	U	U	S	S	U	U	S	S	S	S	S	S	U	U	U	S
Acetic Acid*/**	80-100	U	U	S	U	U	U	S	U	S	U	U	U	–	–	–	S
Acetic Anhydride		U	U	U	U	U	U	–	U	U	U	–	U	U	S	S	U
Acetone*†		U	U	U	U	U	U	U	U	U	U	U	U	S	U	U	S
Acrylic Emulsions*		U	U	S	U	U	U	–	–	S	U	–	–	–	–	–	–
Acrylonitrile		—	—	—	—	S	U	S	U	–	–	U	U	U	U	U	S
Adipic Acid		S	S	S	S	S	S	S	S	S	–	S	S	–	–	–	S
Alcohol:																	
Allyl*		U	U	S	S	S	S	S	S	S	S	U	U	–	–	–	–
Amyl*/**		S	S	S	S	S	U	S	S	S	S	U	U	S	S	S	S
Bensyl*		–	–	–	–	S	S	S	S	–	–	U	U	U	U	S	S
Butyl*		U	U	S	S	S	S	S	S	S	S	S	–	S	S	S	S
Diacetone*		–	–	–	–	S	–	S	U	–	–	–	–	S	S	U	S
Ethyl*		U	U	S	S	S	S	S	S	S	S	S	S	–	S	S	S
Hexyl*		–	–	–	–	–	–	S	S	–	–	S	S	S	S	S	S
Isobutyl*		–	–	–	–	–	–	S	S	–	–	S	–	S	–	S	S
Isopropyl*		–	–	S	U	S	–	S	S	–	–	S	S	S	S	S	S
Methyl*		–	–	S	S	S	–	S	S	–	–	S	S	S	S	S	S
Propyl*		–	–	S	S	S	–	S	S	–	–	S	S	S	S	S	S
Aluminum Salts	Conc.	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	U
Aluminum Hydroxide	10%	–	–	S	S	S	–	S	S	–	–	S	S	S	–	S	S
Alums (All Types)	Conc.	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Ammonia, Dry Gas	100	S	S	S	S	S	S	U	U	S	S	S	S	S	S	–	S
Ammonia, Solution	30	U	U	S	S	S	S	S	S	S	U	S	S	S	S	S	–
Ammonium Salts		S	S	S	S	S	S	S	S	S	S	S	S	S	S	–	U
Amyl Acetate*†	100	U	U	U	U	U	U	S	U	S	U	U	U	S	U	U	–
Amyl Chloride	100	U	U	U	U	U	U	S	S	S	U	U	U	–	–	–	–
Aniline*	100	U	U	U	U	U	U	S	U	–	–	U	U	S	U	S	–
Antifreeze*/**		U	U	S	S	S	U	S	S	S	S	S	S	S	S	S	S
Antimony Chloride		S	S	S	S	S	U	S	U	S	S	S	S	–	–	S	–
Aqua Regia*		U	U	U	U	U	U	S	U	U	U	U	U	U	U	U	U
Arsenic Acid	80	S	S	S	S	S	S	S	S	–	–	S	S	–	–	S	S
Barium Salts		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Benzadlehyde*	10	U	U	U	U	S	U	S	U	–	–	S	S	S	U	U	S
Benzene*		U	U	U	U	U	U	S	S	S	U	–	–	U	U	S	U
Benzene Sulfonic Acid*/**	10	U	U	S	U	S	S	S	U	S	S	S	S	–	–	S	–
Benzoic Acid	All Conc.	S	S	S	S	S	S	S	S	S	S	–	–	–	U	S	–
Black Liquor[2]								S	S			S	S	S	–	S	–
Bleach See statement on NaOCl storage in Technical Data section	10	U	U	S	S	S	S	S	S	S	S	S	–	S	U	S	–
Borax	Satd.	S	S	S	S	S	S	S	S	S	S	S	–	S	S	S	S
Boric Acid	Conc.	S	S	S	S	S	S	S	S	S	S	–	–	S	S	S	S
Bromine Gas	Weak Conc.	U	U	U	U	U	U	S	S	S	S	U	U	–	U	S	–
Bromine Liquid	100	U	U	U	U	U	U	S	S	–	–	U	U	–	U	S	–
Bromine Water†		U	U	U	U	U	U	S	S	–	–	U	U	–	–	S	U
Butadiene		–	–	–	–	–	–	S	S	–	–	U	U	S	–	S	S
Butane		–	–	–	–	S	–	S	S	–	–	U	U	U	S	S	S
Butanediol*	100	U	U	S	S	U	U	S	S	–	–	–	–	–	–	–	–
Butyl Acetate†	100	U	U	S	U	U	U	S	U	S	U	U	U	–	U	–	S
Butyl Alcohol*	100	U	U	S	S	U	U	S	S	S	S	–	–	–	S	S	–
Butylene		–	–	–	–	–	–	S	U	–	–	S	S	U	–	S	S
Butyric Acid	80	U	U	–	–	S	S	S	S	S	U	U	U	–	–	S	–

Chemical Resistance

Description	% Conc.	LLDPE/LDPE/HDPE 70°F	LLDPE/LDPE/HDPE 140°F	XLPE1 70°F	XLPE1 140°F	PP 70°F	PP 140°F	PVDF 70°F	PVDF 140°F	FRP 70°F	FRP 140°F	PVC 70°F	PVC 140°F	EPDM 70°F	NEOPRENE 70°F	VITON® 70°F	316 STAINLESS 70°F
Cadmium Salts		S	S	S	S	S	S	S	S	S	S	–	–	–	S	S	–
Calcium Salts		S	S	S	S	S	S	S	S	S	S	S	S	S	U	S	S
Calcium Hypochlorite**		S	S	S	S	S	S	S	S	S	S	–	–	–	U	S	–
Calgon (sodium hexmeta phosphate)*		U	U	S	S	U	U	S	S	–	–	–	–	–	S	–	S
Camphor Oil		U	U	U	U	U	U	–	–	–	–	–	–	–	–	–	S
Carbon Bisulfide* (disulfide)		U	U	U	U	U	U	S	U	–	–	U	U	U	U	S	U
Carbon Dioxide, wet/dry	100	S	S	S	S	S	S	S	S	S	S	S	S	–	S	S	S
Carbon Monoxide		S	S	S	S	S	S	S	S	S	S	S	S	–	S	S	S
Carbon Tetrachloride†		U	U	U	U	U	U	S	S	U	U	U	U	U	U	S	S
Carbonic Acid		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Castor Oil*		U	U	S	S	U	U	S	S	–	–	S	S	–	S	S	S
Caustic Soda*	10	U	U	S	S	S	S	S	S	–	–	S	S	S	S	S	S
Caustic Soda*	Conc.	U	U	S	S	S	–	U	U	S	U	S	S	S	S	–	U
Chlorine Gas, Dry	100	U	U	U	U	U	U	S	S	S	S	U	U	U	U	S	–
Chlorine Liquid		U	U	U	U	U	U	S	S	–	–	U	U	–	U	–	–
Chlorine Water	Satd.	S	U	S	U	U	U	S	S	S	S	S	S	–	U	–	–
Chloroacetic Acid*	100	U	U	U	U	U	U	S	U	S	U	S	U	S	S	U	U
Chlorobenzene*†		U	U	U	U	U	U	S	U	S	U	U	U	U	U	S	S
Chloroform*†		U	U	U	U	U	U	S	U	–	–	U	U	U	U	S	S
Chlorosulfonic Acid*		U	U	U	U	U	U	U	U	–	–	U	U	U	U	U	U
Chrome Alum	Satd.	S	S	S	S	S	S	S	S	–	–	S	S	S	S	U	S
Chromic Acid	20	S	U	S	S	U	U	S	S	–	–	S	U	U	U	S	S
Chromic Acid**	50	U	U	S	U	U	U	S	U	–	–	U	U	U	U	S	S
Chromic Acid & 50% Sulfuric Acid*/**		U	U	S	U	U	U	S	U	U	U	U	U	U	U	U	U
Citric Acid*	Satd.	U	U	S	S	S	S	S	S	S	S	S	S	–	S	S	S
Coconut Oil Derivatives		S	S	S	S	S	S	S	S	S	S	S	S	–	S	S	S
Cottonseed Oil*		U	U	S	S	S	S	S	S	S	S	S	S	S	S	S	–
Cresol*		U	U	S	U	U	U	S	S	–	–	U	U	U	U	S	S
Cresylic Acid		U	U	U	U	U	U	S	S	–	–	S	U	U	U	S	S
Cupric Salts		S	S	S	S	S	S	S	S	–	–	S	S	S	S	S	U
Cuprous Salts		S	S	S	S	S	S	S	S	–	–	S	S	S	S	S	U
Cyclohexane		U	U	U	U	U	U	S	S	S	S	U	U	U	U	S	S
Cyclohexanone*		U	U	U	U	U	U	S	U	S	U	U	U	–	–	–	S
Detergents*		U	U	S	S	U	U	S	S	S	S	S	S	–	S	S	S
Developers, Photographic		S	S	S	S	S	S	S	S	S	S	S	S	–	–	–	S
Dextrin	Satd.	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	–
Dextrose	Satd.	S	S	S	S	S	S	S	S	–	–	S	S	S	S	S	–
Diazo Salts		S	S	S	S	S	S	–	–	–	–	S	S	–	–	–	–
Diesel Fuel		–	–	S	U	S	U	S	S	S	S	S	U	U	U	S	S
Diethylamine		U	U	–	–	S	U	S	U	S	S	U	U	U	S	U	S
Diethylene Glycol*		U	U	S	S	S	U	–	–	S	S	–	–	–	S	–	S
Dioctylphthalate*		U	U	U	U	U	U	U	U	S	U	U	U	–	U	–	S
Disodium Phosphate		S	S	S	S	S	S	S	S	–	–	S	S	–	–	S	S
Emulsions, Photographic*		U	U	S	S	U	U	S	S	–	–	S	S	–	–	–	–
Epsom Salts (Magnesium Sulfate)		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Ethyl Acetate*	100	U	U	U	U	U	U	U	U	–	–	U	U	–	U	–	S
Ethyl Alcohol*	100	U	U	S	S	S	S	S	S	S	U	S	S	–	S	S	S
Ethyl Bromide		U	U	U	U	U	U	S	S	–	–	U	U	–	–	S	S
Ethyl Chloride†		U	U	U	U	U	U	S	S	–	–	U	U	S	U	S	S
Ethyl Ether		U	U	U	U	U	U	S	U	–	–	U	U	–	U	–	S
Ethylene Chloride		U	U	U	U	U	U	S	S	S	S	U	U	U	U	S	S
Ethylene Dichloride*		U	U	U	U	U	U	S	S	–	–	U	U	U	U	S	S
Ethylene Glycol**		U	U	S	S	S	U	S	S			S	S	S	S	S	S
Ethylene Oxide	12	U	U	U	U	S	U	S	U			U	U	U	U	U	–

Chemical Resistance

Description	% Conc.	LLDPE/LDPE/HDPE 70°F	LLDPE/LDPE/HDPE 140°F	XLPE1 70°F	XLPE1 140°F	PP 70°F	PP 140°F	PVDF 70°F	PVDF 140°F	FRP 70°F	FRP 140°F	PVC 70°F	PVC 140°F	EPDM 70°F	NEOPRENE 70°F	VITON® 70°F	316 STAINLESS 70°F
Fatty Acids*		U	U	S	S	S	U	S	S	S	S	S	U	U	U	S	S
Ferric Chloride		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	U
Ferric Salts		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	U
Ferrous Salts		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	–
Fish Solubles*		U	U	S	S	U	U	–	–	S	S	S	S	–	–	–	–
Fluoboric Acid		S	S	S	S	S	S	S	S	S	S	S	S	–	S	S	U
Fluorine, Dry		U	U	U	U	U	U	S	U	U	U	U	U	–	–	S	S
Fluosilicic Acid	32	S	S	S	S	S	S	S	S	S	U	S	S	–	–	S	–
Fluosilicic Acid	Conc.	S	U	S	U	S	U	S	S	S	U	–	–	–	–	S	–
Formaldehyde*/**	40	U	U	S	U	S	U	S	U	S	U	U	U	S	S	S	S
Formic Acid*	100	U	U	S	S	S	U	S	S	S	U	U	U	S	S	U	–
Freon 11		–	–	–	–	–	–	U	U	–	–	U	U	U	S	U	S
Freon 113		–	–	–	–	–	–	S	S	–	–	S	S	U	S	U	S
Freon 12		S	U	S	U	S	U	S	S	–	–	U	U	–	S	U	–
Fructose	Satd.	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Fruit Juice		S	S	S	S	S	S	S	S	–	–	S	S	U	U	S	S
Fruit Pulp*		U	U	S	S	S	S	S	S	S	S	S	S	U	S	S	S
Fuel Oil*		U	U	S	U	U	U	S	S	S	S	S	S	U	S	S	S
Gallic Acid*	Satd.	U	U	S	S	S	S	S	U	–	–	S	S	–	S	S	–
Gasoline*†		U	U	S	U	U	U	S	S	S	S	S	U	U	U	S	S
Gelatin		S	S	S	S	S	–	S	S	–	–	S	S	S	S	S	S
Gin*		U	U	S	U	S	S	S	S	–	–	–	–	–	–	–	–
Glucose		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Glue, P.V.A.		–	–	–	–	S	–	S	S	–	–	–	–	–	S	S	S
Glycerol*		U	U	S	S	S	S	S	S	S	S	S	U	S	S	S	S
Glycolic Acid*	30	U	U	S	S	S	S	S	U	S	S	S	S	–	–	S	S
Glycols*/**		U	U	S	S	S	U	S	S	S	S	–	–	–	–	–	S
Gold Monocyanide		S	S	S	S	S	S	S	S	S	S	S	S	–	S	S	S
Grape Juice		–	–	S	S	–	–	S	S	–	–	S	S	–	S	S	S
Grape Sugar	Satd.	S	S	S	S	S	S	S	S	S	S	S	S	–	–	S	–
Grease		U	U	S	S	S	U	S	S	–	–	S	S	–	U	S	S
Heptane*†		U	U	S	U	U	U	S	S	S	S	S	S	U	U	S	S
Hexane*†		U	U	S	U	U	U	S	S	S	U	U	U	U	U	S	S
Honey		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Hydraulic Oils (Petroleum)		U	U	S	U	U	U	S	U	U	U	U	U	U	S	U	S
Hydraulic Oils (Synthetic)		U	U	S	U	U	U	S	U	U	U	U	U	–	U	S	S
Hydrazine		–	–	S	S	–	–	S	S	–	–	U	U	S	S	S	S
Hydrobromic Acid	37	S	S	S	S	U	U	S	S	U	U	S	U	–	–	S	U
Hydrochloric Acid[4]	20	S	S	S	S	S	S	S	S	–	–	S	S	S	S	S	U
Hydrochloric Acid[4]	37	S	S	S	S	S	S	S	S	–	–	S	S	U	U	S	U
Hydrocyanic Acid	Satd.	S	S	S	S	S	S	S	S	S	–	S	S	S	S	S	–
Hydrofluoric Acid	50	S	U	S	S	S	–	S	S	–	–	S	U	U	S	S	U
Hydrofluoric Acid	75	–	–	S	S	S	–	S	S	–	–	U	U	U	U	S	U
Hydrofluosilicic Acid	32	S	S	S	S	S	S	S	S	S	U	S	S	–	–	S	S
Hydrofluosilicic Acid	Conc.	S	U	S	S	S	U	S	S	S	U	S	S	–	–	S	–
Hydrogen	100	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Hydrogen Chloride Gas, Dry		S	S	S	S	S	S	S	S	S	S	–	–	–	–	–	–
Hydrogen Peroxide	30	S	S	S	S	S	U	S	S	S	S	S	–	S	S	S	S
Hydrogen Phosphide	100	S	S	S	S	–	–	S	U	–	–	S	S	–	–	–	–
Hydrogen Sulfide		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Hydrogen Sulfide, Aqueous Sol'n		S	S	S	S	S	U	S	S	–	–	S	S	S	U	S	S
Hydroquinone		S	S	S	S	S	S	S	S	–	–	S	S	–	U	S	–
Hypochlorous Acid	Conc.	S	S	S	S	S	S	S	U	S	S	S	S	–	–	S	–
Inks*		U	U	S	S	S	S	S	U	–	–	–	–	–	–	–	S
Iodine		–	–	–	–	U	U	S	S	–	–	U	U	U	U	S	U
Iodine (K Solution)	Conc.	U	U	U	U	U	U	–	–	–	–	–	–	–	–	–	–

Chemical Resistance

Description	% Conc.	LLDPE/LDPE/HDPE 70°F	LLDPE/LDPE/HDPE 140°F	XLPE1 70°F	XLPE1 140°F	PP 70°F	PP 140°F	PVDF 70°F	PVDF 140°F	FRP 70°F	FRP 140°F	PVC 70°F	PVC 140°F	EPDM 70°F	NEOPRENE 70°F	VITON® 70°F	316 STAINLESS 70°F
Isopropyl Alcohol*		U	U	S	U	S	U	S	S	–	–	S	U	S	S	S	S
Isopropyle Ether		–	–	–	–	–	–	S	U	–	–	–	–	U	U	U	S
Isooctane		–	–	–	–	–	–	S	S	–	–	–	–	S	S	S	S
Jet Fuel (JP3, JP4, JP5)		–	–	–	–	S	U	S	S	–	–	S	U	U	U	S	S
Kerosene*		U	U	S	U	S	U	S	S	S	S	S	U	U	U	S	S
Ketones		–	–	–	–	S	–	U	U	–	–	U	U	S	U	U	S
Lactic Acid*	90	U	U	S	U	S	U	S	U	S	S	S	–	S	S	S	–
Lard Oil		U	U	S	U	U	U	S	U	–	–	S	U	U	U	S	S
Latex*		U	U	S	S	S	S	–	–	–	–	–	–	–	U	S	S
Lead Acetate	Satd.	S	S	S	S	S	S	S	S	S	S	S	S	–	–	S	–
Lime	30	–	–	S	S	S	U	–	–	–	–	S	U	S	S	S	–
Linseed Oil*		U	U	S	U	S	S	S	S	S	S	S	S	–	S	S	S
Lube Oil*		U	U	S	U	S	U	S	S	–	–	S	U	–	–	S	S
Magnesium Salts		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Maleic Acid		S	U	S	U	S	U	S	S	–	–	S	S	U	U	S	S
Mercuric Salts	Satd.	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	U
Mercurous Salts	Satd.	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	–
Mercury		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Methyl Acetate		–	–	–	–	–	–	S	U	–	–	U	U	U	U	U	S
Methyl Alcohol*	100	U	U	S	S	S	S	S	S	S	U	S	U	S	S	S	S
Methyl Bromide		U	U	U	U	U	U	S	S	–	–	U	U	U	U	S	S
Methyl Butyl Ketone		–	–	–	–	U	U	U	U	–	–	U	U	S	U	U	S
Methyl Cellosolve		–	–	–	–	S	U	S	S	–	–	U	U	U	U	U	S
Methyl Chloride*		U	U	U	U	U	U	S	S	–	–	U	U	U	U	S	S
Methyl Isobutyl Ketone		–	–	–	–	U	U	U	U	–	–	U	U	U	U	U	S
Methyl Ethyl Ketone*†	100	U	U	U	U	S	U	U	U	–	–	U	U	S	U	–	S
Methyl Methacrylate		–	–	–	–	–	–	S	U	–	–	S	–	U	U	U	–
Methyl Sulfuric Acid*		U	U	S	U	S	U	S	U	S	S	S	U	–	–	–	–
Methylamine		–	–	–	–	–	–	U	U	–	–	U	U	–	–	–	S
Methylene Chloride*	100	U	U	U	U	U	U	U	U	–	–	U	U	–	U	–	–
Milk		S	S	S	S	S	S	S	S	–	–	S	S	S	S	S	S
Mineral Oils		U	U	S	U	S	U	S	S	S	S	S	U	–	S	S	S
Molasses	Comm.	S	S	S	S	S	S	S	S	S	S	S	S	U	–	–	S
Naphtha*		U	U	U	U	S	U	S	S	S	S	S	U	U	U	S	S
Naphthalene*		U	U	U	U	S	U	S	S	S	S	U	U	U	U	S	S
Nickel Salts		S	S	S	S	S	S	S	S	S	S	S	S	–	S	S	U
Nicotine*	Dilute	U	U	S	S	S	S	S	U	–	–	S	S	–	–	–	–
Nicotinic Acid*		U	U	S	S	S	S	S	S	–	–	S	S	–	–	–	–
Nitric Acid**	0-29	S	S	S	S	S	U	S	U	S	U	S	S	–	U	S	S
Nitric Acid**	30-49	S	U	S	U	U	U	S	U	S	U	U	U	U	U	S	S
Nitric Acid**	50-69	U	U	U	U	U	U	U	U	–	–	U	U	–	U	S	S
Nitric Acid**	70-98	U	U	U	U	U	U	U	U	U	U	U	U	–	U	U	–
Nitrobenzene*	100	U	U	U	U	U	U	S	U	–	–	U	U	S	U	U	S
Oils*																	
Essential		–	–	–	–	–	–	S	S	–	–	–	–	–	U	–	S
Mineral		–	–	S	U	–	–	S	S	–	–	S	U	–	S	S	S
Vegetable		–	–	S	U	–	–	S	S	–	–	S	U	–	S	S	S
Lubricating		–	–	S	U	–	–	S	S	–	–	S	U	–	S	S	S
Oils and Fats*		U	U	S	U	S	U	S	S	S	S	S	U	–	S	S	S
Oleic Acid	Conc.	U	U	S	U	S	U	S	S	S	S	S	U	U	U	S	S
Oleum		U	U	U	U	U	U	U	U	–	–	U	U	U	U	S	–
Orange Extract		S	S	S	S	S	S	S	S	–	–	–	–	–	–	–	–
Oxalic Acid	Satd.	S	U	S	U	S	S	S	U	S	S	S	U	–	S	S	–
Ozone		U	U	U	U	U	U	S	S	–	–	S	U	U	–	S	S
Palmitic Acid		S	U	S	U	S	U	S	S	S	S	S	U	–	–	S	S
Paraffin		–	–	–	–	S	U	S	S	–	–	S	U	U	–	S	S

Chemical Resistance

Description	% Conc.	LLDPE/LDPE/HDPE 70°F	LLDPE/LDPE/HDPE 140°F	XLPE1 70°F	XLPE1 140°F	PP 70°F	PP 140°F	PVDF 70°F	PVDF 140°F	FRP 70°F	FRP 140°F	PVC 70°F	PVC 140°F	EPDM 70°F	NEOPRENE 70°F	VITON® 70°F	316 STAINLESS 70°F
Pentane		–	–	–	–	–	–	–	–	–	–	–	–	U	U	S	U
Perchloric Acid	10	S	S	S	S	S	S	S	S	S	U	S	U	–	–	S	U
Perchlorethylene		U	U	U	U	U	U	S	S	–	–	U	U	U	U	S	S
Phenol Carbolic Acid	5	S	U	S	U	S	S	S	S	–	–	S	U	U	U	S	–
Phosphoric Acid	50	S	S	S	S	S	S	S	S	S	S	S	U	S	S	S	S
Phosphoric Acid	85	S	U	S	S	S	U	S	S	S	S	S	U	S	S	S	–
Phosphorus Pentoxide	100	S	U	S	U	S	U	S	S	–	–	S	–	–	–	–	–
Phosphorus Trichloride	100	U	U	–	–	U	U	S	S	–	–	U	U	–	–	–	S
Photographic Solutions*		S	U	S	S	S	S	S	S	S	U	S	S	–	S	–	–
Pickling Baths, Hydrochloric Acid*		U	U	S	S	S	S	–	–	S	S	–	–	–	–	–	–
Pickling Baths, Sulfuric Acid*		U	U	S	S	S	S	–	–	S	S	–	–	–	–	S	–
Pickling Baths, Sulfuric-Nitric*/**		U	U	S	U	S	U	–	–	S	U	U	U	–	–	S	–
Picric Acid*	1	U	U	S	U	S	U	S	U	S	S	U	U	U	S	S	–
Plating Solutions Without Wetting Agents**		S	U	S	U	S	U	S	U	S	U	S	U	–	S	S	S
Potassium Salts		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	–
Potassium Hydroxide*	0-10	U	U	S	U	S	U	S	U	U	U	S	S	S	U	S	U
Propane		–	–	–	–	–	–	S	S	–	–	S	U	U	S	S	S
Propyl Alcohol*		U	U	S	S	S	S	–	–	–	–	S	U	–	S	S	S
Propylene Glycol*		U	U	S	S	S	U	S	S	S	S	–	–	–	U	S	S
Pyridine*		U	U	S	U	S	S	U	U	–	–	U	U	U	U	U	U
Pyrogallic Acid		–	–	–	–	S	U	S	U	–	–	S	U	–	–	S	S
Rayon Coagulating Bath*		U	U	S	S	S	S	–	–	–	–	S	S	–	–	–	–
Selenic Acid		S	S	S	S	S	U	S	S	–	–	S	S	–	–	–	–
Shortening*		U	U	S	S	S	S	–	–	–	–	–	–	–	–	–	–
Silicic Acid		S	S	S	S	S	S	S	S	S	S	S	S	–	–	S	–
Silver Salts		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Soap Solution*	Any Conc.	U	U	S	S	U	U	S	U	S	S	S	S	S	S	S	S
Soda Ash		S	S	S	S	S	S	S	S	U	U	S	S	S	S	S	S
Sodium Salts		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Sodium Hexametaphosphate*		U	U	S	S	U	U	–	–	–	–	–	–	–	S	–	S
Sodium Hydroxide*	10	U	U	S	S	S	S	S	S	–	–	S	S	S	S	S	S
Sodium Hydroxide*	Conc.	U	U	S	S	S	–	U	U	S	U	S	S	S	S	–	U
Sodium Hypochlorite** See NaOCl Storage statement, Pg 38.		U	U	S	S	U	U	S	S	S	S	S	–	S	U	S	U
Sour Crude*		U	U	S	U	S	U	S	S	S	S	S	S	–	–	S	–
Stannic Salts		S	S	S	S	S	S	S	S	S	S	S	S	S	–	S	–
Stannous Salts		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	–
Starch Solution	Satd.	S	S	S	S	S	S	S	S	S	S	S	S	–	–	S	S
Stearic Acid*	100	U	U	S	S	S	S	S	S	S	S	U	U	–	S	S	S
Stoddard's Solvent		–	–	–	–	U	U	S	S	–	–	U	U	U	U	S	S
Styrene Monomer		–	–	–	–	–	–	S	S	–	–	U	U	U	U	S	S
Sulfur		S	U	S	U	S	U	S	S	–	–	U	U	S	S	S	S
Sulfur Chloride		U	U	U	U	U	U	S	U	–	–	U	U	U	U	S	U
Sulfur Dioxide**		S	U	S	U	S	U	S	S	S	S	U	U	S	S	S	S
Sulfuric Acid[3]**	0-49	S	S	S	S	S	S	S	S	S	S	S	S	–	S	S	U
Sulfuric Acid[3]**	51-74	U	U	S	U	S	U	S	S	–	–	S	S	U	U	S	U
Sulfuric Acid[3, 5]**	75-95	U	U	S	U	U	U	S	U	–	–	U	U	U	U	S	U
Sulfuric Acid[3, 5]**	96-98	U	U	U	U	–	–	S	U	–	–	U	U	U	U	S	U
Sulfuric Acid, Fuming*[3]/**		U	U	U	U	U	U	U	U	–	–	U	U	U	U	S	–
Sulfurous Acid	Conc.	S	S	S	S	S	S	S	S	S	S	S	S	U	U	S	–
Tallow		S	U	S	U	S	U	S	S	–	–	–	–	–	–	S	S
Tannic Acid*	Conc.	U	U	S	S	S	S	S	S	S	S	S	S	–	S	S	S
Tanning Liquors*		–	–	S	S	–	–	S	U	–	–	S	S	–	–	–	S
Tartaric Acid	Satd.	S	S	S	S	S	S	S	S	S	S	S	S	–	S	S	–
Tetrachlorethane		U	U	U	U	U	U	S	S	–	–	–	–	U	U	S	S

Chemical Resistance

Description	% Conc.	LLDPE/LDPE/HDPE 70°F	LLDPE/LDPE/HDPE 140°F	XLPE1 70°F	XLPE1 140°F	PP 70°F	PP 140°F	PVDF 70°F	PVDF 140°F	FRP 70°F	FRP 140°F	PVC 70°F	PVC 140°F	EPDM 70°F	NEOPRENE 70°F	VITON® 70°F	316 STAINLESS 70°F
Tetrahydrofuran*		U	U	U	U	U	U	U	U	–	–	U	U	U	U	U	S
Thionyl Chloride		U	U	U	U	U	U	U	U	–	–	U	U	–	–	–	U
Toluene*†		U	U	U	U	U	U	S	S	S	U	U	U	U	U	S	S
Transformer Oil*		U	U	S	U	S	U	–	–	–	–	U	U	–	–	–	S
Trichloroethylene		U	U	U	U	U	U	S	U	S	S	U	U	U	U	S	S
Trisodium Phosphate		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	–
Turpentine*	Satd.	U	U	U	U	U	U	S	S	U	U	U	U	U	U	S	S
Urea*		U	U	S	S	S	S	S	S	S	S	S	U	–	–	–	S
Urine	Conc.	S	S	S	S	S	S	S	S	S	S	S	S	S	U	S	S
Vanilla Extract*		U	U	S	S	S	S	–	–	–	–	–	–	–	–	–	–
Vinegar* (4-8% of Acetic Acid)		U	U	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Water, Acid, Mine		–	–	S	S	S	-	S	U	–	–	S	S	–	U	S	U
Water, Distilled		–	–	S	S	S	S	S	S	–	–	S	S	S	S	S	S
Water, Deionized		U	U	S	U	S	S	S	S	–	–	S	S	S	S	S	S
Water, Fresh		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Water, Salt		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	U
Wetting Agents*		U	U	S	S	U	U	S	S	S	S	–	––	–	-	–	–
Whiskey*		U	U	S	S	S	S	S	S	–	–	S	S	S	S	S	S
White Liquor (Pulp Mill)		–	–	–	–	S	–	S	U	–	–	S	S	–	S	S	S
White Water (Paper Mill)		–	–	–	–	S	–	–	–	–	–	–	–	–	S	S	S
WInes		S	S	S	S	S	S	S	S	–	–	S	S	–	–	S	–
Xylene*†		U	U	U	U	U	U	S	S	U	U	U	U	U	U	S	S
Yeast		S	S	S	S	S	S	S	S	S	S	–	–	S	S	S	–
Zinc Salts		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	–

Legend

S – Satisfactory

U – Unsatisfactory

- – No Test Data

* – These chemicals can cause stress-cracking of LLDPE, LDPE and HDPE under certain conditions. Rotomolded tanks are essentially stress-free and are not usually affected by stress-cracking chemicals. However, these chemicals may affect the service life of tanks with welded fittings or seams, and unsupported tanks operating under heavy loads. Use XLPE tanks which have excellent environmental stress-crack resistance.

** – Limited Warranty one year—see page 45.

+ – Permeation by this solvent may cause softening, swelling and/or considerable loss of fluid in polyethylene tanks.

1 – XLPE exhibits high environmental stress-crack resistance, but available data is limited and tests are recommended for severe conditions or chemicals not listed in this chart.

2 – Mostly satisfactory, but black liquor varies considerably in composition and temperature. Field testing is recommended.

3 – Use of Sulfuric Acid may cause initial discoloration of interior tank wall surface due to oxidation.

– Refer to Chemical Resistance Chart for fittings and gaskets.

4 – Vapors from **Hydrochloric Acid** are extremely aggressive. When storing this product, please make sure you have installed an appropriate **scrubbing system** or specify a **bolted and gasketed manway cover** with plastic bolts. **Contact Saint-Gobain for pricing.**

5 – For Bulk Storage of **Sulfuric Acid concentrations between 80%-95%** please specify XLPE Tanks designed for **2.2 specific gravity**. We recommend this heavier wall tank due to the stress-cracking and oxidizing nature of this chemical. **Contact Saint-Gobain for pricing** on these tanks.

WARNING: Misuse of Saint-Gobain products can be potentially dangerous. Before using this product, please refer to the appropriate Saint-Gobain catalogs/inserts and the various warnings, information, instructions and chemical resistance chart. If any doubt exists about a specific use of Saint-Gobain products, please contact Technical Support, Saint-Gobain Performance Plastics, 1044 MacArthur Rd., Reading, PA 19605 or call (800) 451-0770, fax (610) 376-4802.

Materials

LLDPE—Linear Low-Density Polyethylene

LDPE—Low-Density Polyethylene

HDPE—High-Density Polyethylene

XLPE—Cross-Linked High-Density Polyethylene

PP—Polypropylene

PVDF—Polyvinylidene Fluoride

FRP—Fiberglass-Reinforced Polyester

PVC—Polyvinyl Chloride

EPDM—Ethylene Propylene Diene Monomer

NEOPRENE—A chloroprene polymer, synthetic rubber

VITON® —A fluoroelastomer, registered trademark of E.I. du Pont de Nemours and Company, Inc.