Product Information

Lewatit(R) S 1468

Lewatit(R) S 1468 is a strongly acidic, gelular cation exchange resin with beads of uniform particle size (monodispersed) based on a styrene / dvb copolymer. The monodispersed beads have extremely high chemical and osmotic stability. **Lewatit(R) S 1468** is characterized by high monodispersity (uniformity cofficient: max. 1.1) and very low fines content which results in low pressure losses and increased operating capacity when compared to standard resins.

Applications include: softening of solutions, especially for sugar and pectin thin juices, decationization of organic products (e.g. sugar beet, sugar cane, starch sugar, glycerine, gelatine, whey and food acids) and extraction of amino acids, e.g. lysine. **Lewatit(R) S 1468** is in compliance with FDA Regulations 21 CFR 173.25 (a). **Lewatit(R) S 1468** is tested and certified by the Water Quality Association to meet NSF/ANSI Standard 61.

Physical and Chemical Properties		**U.S. Units**		**Metric Units**	
Functional group			sulfonic acid		sulfonic acid
Matrix			dvb / styrene		dvb / styrene
Appearance			light brown, translucent		light brown, translucent
Ionic form as shipped			Na^+		Na^+
Uniformity coefficient		max.	1.1	max.	1.1
Mean bead size*	AB +/- 0.05			mm	0.60
Shipping weight	+/- 5%	lbs/ft³	51	g/l	820
Density				g/ml	1.28
Water retention*		%	42 - 48	%	42 - 48
Total capacity*	min.	Kgr/ft³	43.7	eq/l	2.0
Volume change	Na^+ >> H^+	max. %	8	max. %	8
Stability	pH range		0 - 14		0 - 14
Stability	temp range	°F	34 - 248	°C	1 - 120
Storability	of product	max. years	2	max. years	2
Storability	temp range	°F	34 - 104	°C	1 - 40

*** Specification values subjected to continous monitoring.**

MSDS: Material Safety Data Sheets are available for all Sybron Chemicals Inc. products. The MSDS contains pertinent information that may be required to ensure safe handling and use of our products. It is recommended that copies of the MSDS be obtained by calling **1-800-678-0020** or **1-800-526-9377**.

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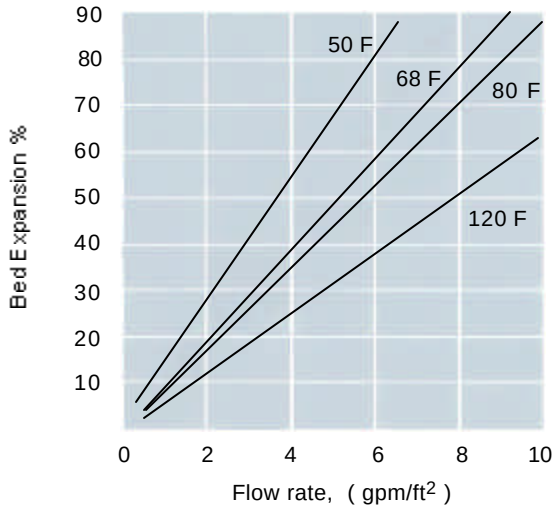
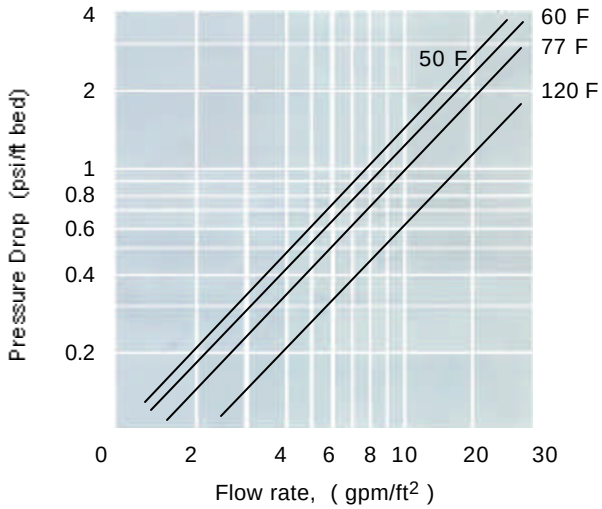
Recommended Operating Conditions		U.S. Units		Metric Units	
Operating temperature		max. °F	248	max. °C	120
Operating pH range			0 - 14		0 - 14
Bed Depth		min. inches	31	min. mm	800
Pressure drop			see chart		see chart
Max. pressure loss		psi	28	Kpa	200
Surface flow rate	exhaustion	gpm/ft²	2 - 25	m/hr	5 - 60
Surface flow rate	backwash		see chart		see chart
Bulk flow rate	exhaustion	gpm/ft³	1 - 6+	BV/hr	8 - 48+
Bed expansion	%		50 - 75	%	50 - 75
Freeboard	% of bed depth		60 - 80		60 - 80
Regenerant	type		acid | NaCl		acid | NaCl
Regenerant	level	lbs/ft³	5 - 20	g/l	80 - 320
Regenerant	concentration	%	0.5-6 | 8-13	%	0.5-6 | 8-13
Surface flow rate	regeneration	gpm/ft²	0.4 - 4	m/hr	1 - 10
Surface flow rate	rinse, slow / fast	gpm/ft²	0.4-4 / 2-20	m/hr	1-10 / 5-50
Bulk flow rate	regeneration	gpm/ft³	0.5 - 1.5	BV/hr	4 - 12
Bulk flow rate	rinse, slow / fast	gpm/ft³	0.5-1.5 / 1-6	BV/hr	2.5-8 / 8-48
Rinse water requirements	slow / fast	gal/ft³	7-15 / 14-40	BV	1-2 / 2-5

Backwash Expansion



Pressure Loss



linear velocity: m/hr = gpm/ft² X 2.44 pressure drop: kPa = psi X 6.89476

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Additional Information and Regulations

Safety precautions
Strong oxidants, e.g. nitric acid, can cause violent reactions when in contact with ion exchange resins.

Toxicity
The material safety data sheet must be observed. The MSDS contains additional data on product description, transport, storage, handling, safety and ecology.

Storage
It is recommended to store ion exchange resins at temperatures above the freezing point of water. Ion exchange resin should not be stored in direct sunlight. If the resin should become frozen, the resin should be left to thaw out at ambient temperature before handling. No attempt should be made to accelerate the thawing process.

Disposal
The MSDS contains additional data on product safety and disposal.

Start-up Conditions
When using**Lewatit(R) S 1468** for potable water or food applications, special care should be given to the initial cycles of the new resin. The resin should be rinsed with 20 bed volumes of rinse water at a flow rate of 2-4 gpm/sq.ft. at ambient temperature.

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