

## Lewatit® TP 260

**Lewatit TP 260** is a premium grade weakly acidic, macroporous-type ion exchange resin with chelating aminomethylphosphonic functional groups for the selective removal of alkaline earths and heavy metal cations. **TP 260** has high and excellent mechanical and chemical stability in acid and alkaline media.

### Lewatit TP 260 applications\*:

secondary brine purification and removal of heavy metals -- zinc, tin, and lead.

### Typical physical and chemical properties\*\*

		US Units		International Units	
<b>Ionic form as shipped</b>			Di-Na <sup>+</sup>		Di-Na <sup>+</sup>
<b>Bead size</b>	> 90%	US mesh	16 - 40	mm	0.4 - 1.25
<b>Effective size</b>		mm.	0.55 +- 0.06	mm	0.55 +- 0.06
<b>Shipping weight</b>		lbs/ft <sup>3</sup>	48	g/l	770
<b>Density</b>				g/ml	1.2
<b>Water retention</b>		% weight	59 - 61	%	59 - 61
<b>Total capacity, min.</b>	hydrogen form	kgr CaCO <sub>3</sub> / ft <sup>3</sup>	50	eq/l	2.3
<b>Volume change</b>	Na <sup>+</sup> >> H <sup>+</sup>	max. %	-25	max. %	-25
<b>Stability</b>	temperature range	°F	14 - 185	°C	-10 - 85
	pH range		0 - 14		0 - 14
<b>Storability</b>	of product	min years	2	min. years	2
	temperature range	°F	-4 - 104	°C	-20 - 40

Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling Lewatit TP 260. Before working with this product, you must read and become familiar with the available information on its hazards, proper use, and handling. This cannot be overemphasized. Information is available in several forms, e.g., material safety data sheets and product labels. Consult your Sybron Chemicals Inc. representative or contact Bayer's Product Safety and Regulatory Affairs Department in Pittsburgh, PA.

\*As with any product, use of the products mentioned in this publication in a given application must be tested (including field testing, etc.) in advance by the user to determine suitability.

\*\*These items are provided as general information only. They are approximate values and are not part of the product specifications.

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# Lewatit® TP 260

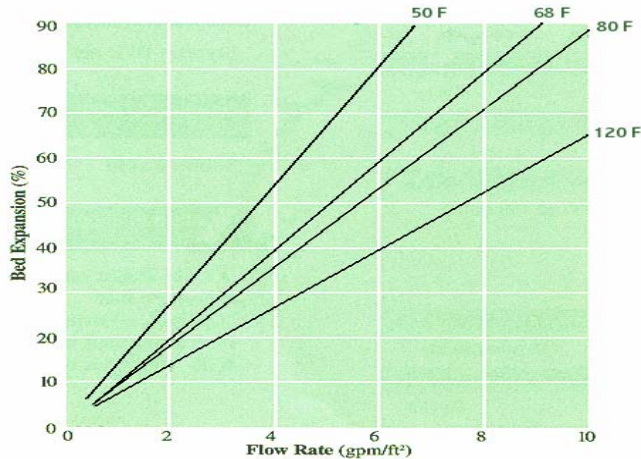
## Recommended Operating Parameters

## US Units

## International Units

Operating Temperature		max. °F	176	max. °C	80		
Operating pH-range			1 - 12		1 - 12		
Bed Depths		min. ft	3	min. mm	1000		
Pressure Drop			see chart		see chart		
Max. adm. Pressure drop		psi	36	kPa	250		
Surface Flow Rate	exhaustion	gpm/ft <sup>2</sup>	16	m/h	40		
	backwash	gpm/ft <sup>2</sup>	see chart	m/h	see chart		
Bulk Flow Rate	exhaustion	gpm/ft <sup>3</sup>	1 - 5	BV/h	8 - 40		
Bed Expansion		%	see chart	%	see chart		
Freeboard	% of bed depth	%	80	%	80		
Regenerant	type		HCl	H <sub>2</sub> SO <sub>4</sub>	HCl	H <sub>2</sub> SO <sub>4</sub>	
	level	lb/ft <sup>3</sup>	7.5 - 10	10 - 15	g/l	120 - 160	160 - 240
	concentration	%	4 - 10	5 - 15	%	4 - 10	5 - 15
Surface Flow Rate	regeneration	gpm/ft <sup>2</sup>	0.4 - 4	1 - 6	m/h	1 - 10	3 - 15
	rinsing, slow / fast	gpm/ft <sup>2</sup>	0.4 - 6 / 2 - 16		m/h	1 - 15 / 5 - 40	
Bulk Flow Rate	regeneration	gpm/ft <sup>3</sup>	0.3 - 1	0.5 - 4	BV/h	2.5 - 8	4 - 32
	rinsing, slow / fast	gpm/ft <sup>3</sup>	0.3 - 4 / 1 - 5		BV/h	2.5 - 32 / 8 - 40	
Conditioning			NaOH		NaOH		
	type		Mono-Na	Di-Na	Mono-Na	Di-Na	
	level	lb/ft <sup>3</sup>	2.5 - 3	5 - 6	g/l	40 - 45	80 - 90
	concentration	%	4		%	4	
Surface Flow Rate	conditioning	gpm/ft <sup>2</sup>	2		m/h	5	
	rinsing, slow / fast	gpm/ft <sup>2</sup>	/		m/h	/	
Bulk Flow Rate	conditioning	gpm/ft <sup>3</sup>			BV/h		
	rinsing, slow / fast	gpm/ft <sup>3</sup>	/		BV/h	/	
Rinsing Water Requirement		gals./ft <sup>3</sup>		BV	3 - 5		

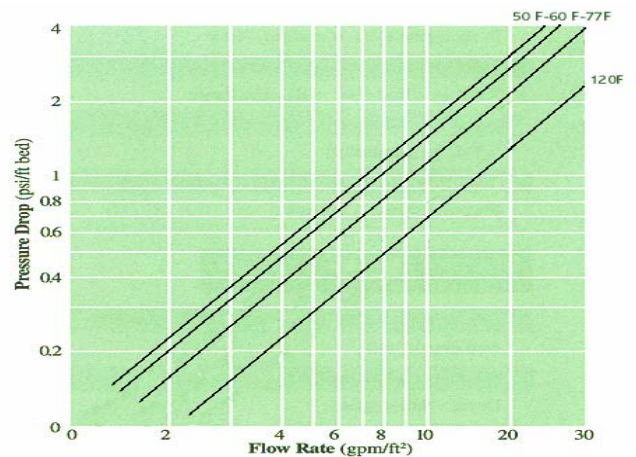
### Bed Expansion Curve



$$^{\circ}\text{C} = 5 / 9 ( ^{\circ}\text{F} - 32 )$$

$$\text{m} = \text{ft} * 0.3048$$

### Pressure Loss Curve



$$\text{kPa} = \text{psi} * 7.03$$

$$\text{m} / \text{hr} = \text{gpm} / \text{sq.ft.} * 2.44$$

Note: The information contained in this bulletin is current as of April 2003. Please contact Sybron Chemicals Inc. to determine whether this publication has been revised.

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