

Windsor Salt

System Saver® Crystal II™



PDS III-01
1/97
R-01

Description

System Saver Pellets for recharging water softeners are compressed from vacuum granulated salt incorporating a very low concentration of a combination of resin cleaning additives. The pellets contain a minimum of 99.5% sodium chloride and are virtually 100% water soluble.

Use

System Saver Pellets are designed for use in home and light commercial water softeners and other ion-exchange water treatment processes in which sodium chloride is used for resin regeneration. The product can be applied effectively in essentially all designs of softener brine tanks. System Saver Formula is not acidic nor abusive to softener parts and resin. It is compatible with all types of chemicals and specialized resins used in the treatment of iron and other foulants.

System Saver Pellets will not prevent resin fouling with water containing more than 2 ppm iron.

Benefits

System Saver Pellets provide for a continuous feed of a mild cleansing formula with each resin regeneration, helping to flush accumulated dirt, bacterial and organic residues, and various iron, calcium and silica mineral deposits from the complete softener system. Continuous cleansing aids in the prevention of resin fouling and clogging of valves which should help to extend the operating life of the resin and equipment.

Specific water quality benefits are:*

- Consistently softer water - up to 5% more soft water with each softening cycle.
- Clearer water- Improved water clarity with every cycle. Initial use of System Saver with extremely dirty resins may result in a temporary discoloration of the soft water due to incomplete flushing of loosened dirt and mineral deposits. Two or more manual regenerations may be required to completely restore water clarity.
- Cleaner - Nearly 60% reduction of Insolubles in softened water.

* Based on laboratory tests.

Production Plants

Pugwash, NS; Windsor, ON; Regina, SK; Lindbergh, AB

Chemical Properties

Most of the impurities are completely soluble and do not adversely affect water softening performance. The principal impurity is calcium sulfate. Other impurities consist of traces of calcium chloride, magnesium sulfate, potassium chloride and magnesium chloride. The pH of a 10% solution prepared with deionized water falls between 6.0 - 8.0.

Chemical analysis, moisture-free basis, is as follows:

	Typical	Range
*Sodium Chloride (%)	99.60	99.3 - 99.9
Calcium Sulfate (%)	0.17	0.07- 0.40
Other Salts (%)	0.03	0.0 - 0.50
Additives (%)	-	< 0.2
Moisture (%)	-	< 0.1
Water Insolubles mg/kg**	20	5 - 40

* By difference of impurities and additives, moisture-free basis (ASTM procedures).

** 1.0 milligram per kilogram (mg/kg) is equivalent of 0.0001%, or 1 ppm.

Sieve Analysis†

U.S.S. Mesh	Opening Millimeters	Percent Retained**
1/2 inch	12.7	74
3/8 inch	9.5	14
3	6.7	6
6	3.35	2
20	0.85	1
Pan	-	3

**On individual screens

†Mechanical

Voids/Break Strength

Typical compacted bulk density is 1070 - 1150 kg/m³ (67- 72 lbs/ft³). Initial voids immersed in water are 48 - 52%. Void capacity does not vary significantly over several regeneration cycles in a softener brine tank. Pellets are compressed sufficiently hard to avoid a defect called mushing, which is a complete breakdown of the pellet structure upon prolonged immersion in brine. Severe mushing can result in bridging and channeling of the salt mass, severely restricting the strength or volume of brine, and leading to incomplete resin regeneration and premature hardness break-through. To ensure mushing is avoided, System Saver Pellets must meet a rigid break strength standard after prolonged immersion in brine.

The Canadian Salt Company Limited

755 boul. St-Jean, Suite 700, Pointe-Claire, Quebec H9R 5M9
514/630-0900 Fax 514/694-2451 www.windsorsalt.com



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	20 kg Film Bag	40 kg Film Bag
Commodity Code	1421	1422
UPC Code	0 66010 01421 5	0 66010 01422 2
Material	6 Mil Polyethylene	6 Mil Polyethylene
Net Wt (kg)	20	40
Gross Weight (kg)	20.6	40.5
Dimensions L x W x H (cm)	51 x 34 x 9.5	65 x 41 x 13
Cube (m³)	0.020	0.036
Palletized*		
Tiers		
Windsor	7	6
Regina, Lindbergh	7	6
Pugwash	8	6
Bags/Tier		
Windsor	8	5
Regina, Lindbergh	7 (8 bottom tier)	5
Pugwash	7	5
Bags/Pallet		
Windsor	56	30
Regina, Lindbergh	50	30
Pugwash	56	30
*Gross Weight (kg)		
Windsor	1188	1261
Regina, Lindbergh	1064	1261
Pugwash	1188	1261
*Height (cm)	82	88
*Cube (m³)	1.2	1.33

*Includes 122 cm x 102 cm standard wood pallet weighing 34 kg. Pallet specifications for 40 kg bags same for all locations.



WINDSOR® CRYSTAL II^{REG'D T.M.} SYSTEM SAVER® GUARANTEE

If after using **Windsor® System Saver®** you are not fully satisfied with the product's performance during normal usage, we'll send you either a coupon for a free 20kg bag of **System Saver®** or a full refund of the purchase price. To receive a FREE coupon, simply send us a note explaining your dissatisfaction and include the clipped proof of purchase from the **System Saver®** bag, the date code from the bottom of the bag and your name and return address. If you prefer a full refund, send the items above and the original sales receipt, circling the price of **System Saver®**, to the address below:

Windsor® Crystal II^{REG'D T.M.} System Saver® Guarantee
The Canadian Salt Company Limited,
Marketing Department
755 Boul. St-Jean, Suite 700,
Pointe-Claire, Quebec H9R 5M9

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