

DIMETHYL SULFOXIDE IRRIGATION SOLUTION

There is currently only one supplier of dimethyl sulfoxide (DMSO) 50 % irrigation solution in Canada.¹ The Sandoz product has been discontinued.²

DIN	Manufacturer	Brand Name	Ingredient	Strength
<u>00493392</u>	MYLAN PHARMACEUTICALS ULC	RIMSO-50	DIMETHYL SULFOXIDE	500 MG / G

Labelled Indication:

- Interstitial cystitis³
 - Second line option after physical therapy⁴
 - An option to second line oral medication (amitriptyline, pentosan polysulfate sodium, cimetidine, hydroxyzine)^{4,5}

SHORTAGE MANAGEMENT:

Extemporaneous compounding:

- Concentrate (99.7% DMSO) is available from bulk chemical vendors (e.g. Galenova).^{6,7}
- DMSO is incompatible with plastics such as polysulfone, flexible and rigid PVC tubing and polycarbonate; it should be stored in glass containers.⁸
- Dilute with water to prepare a 50 % DMSO solution and sterilize according to USP sterile compounding guidelines.⁹
- DMSO is absorbed into plastic; therefore irrigation solution must be prepared on the day it is administered.⁹

Therapeutic options for intravesicular administration:

- Bladder hydrodistention^{4,5}
- Lidocaine (e.g. daily bladder instillations for 5 days with alkalized lidocaine (200 mg)/sodium bicarbonate 8.4% solution (final volume of 10 mL), instilled into an empty bladder and allowed to dwell for 1 hour before drainage)¹⁰
- Heparin (e.g. 10,000 units with 10 ml of sterile water three times weekly)¹¹
- Lidocaine and heparin (e.g. 40,000 U heparin, 8 mL 1% or 2% lidocaine, and 3 mL 8.4% sodium bicarbonate three times weekly for 2 weeks)¹²

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References:

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