

Water Technologies & Solutions fact sheet

BetzDearborn* DCL95

dechlorination treatment for food-grade applications

description and features

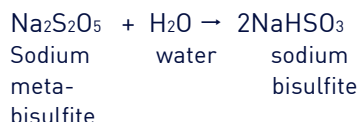
BetzDearborn DCL95 is used to remove free and combined chlorine from reverse osmosis and ultrafiltration feedwaters. This powder product is a high quality >99% by weight sodium metabisulfite ($\text{Na}_2\text{S}_2\text{O}_5$).

BetzDearborn DCL95 offers the following features:

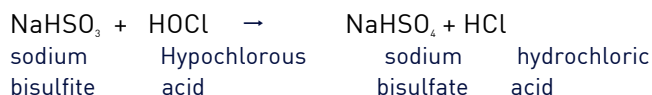
- The ingredients in this product are Generally Recognized As Safe by FDA, for use in either human or animal food.
- Extremely economical

chemistry of dechlorination

Hydrolysis of sodium metabisulfite to sodium bisulfite:



Deactivation of chlorine by sodium bisulfite:



typical applications

Feedwaters to membrane systems often have been treated with chlorine to retard micro-biological growth prior to the membrane separation process. This chlorine, however, can irreversibly damage many thin film composite membranes.

The sodium bisulfite in BetzDearborn DCL95 quickly deactivates chlorine and protects membranes from oxidation.

application

1.44 ppm (mg/L) of BetzDearborn DCL95 are required to remove 1 ppm (mg/L) of chlorine or chloramine.

DCL95 application dosages should be limited by the chlorine demand. It has been observed that an excess of sodium bisulfite in the RO feedwater may increase the incidence of microbiological growth in the membrane systems.

Your SUEZ representative can assist you with identifying chlorine levels in your process and in defining the requirements for BetzDearborn DCL95.

stability

Please refer to the Material Safety Data Sheet for stability information. The product may be slowly degraded by oxygen after the package is opened; the rate of degradation increases with higher temperatures. BetzDearborn DCL95 solutions are limited to a maximum of approximately 20% concentration, and should ideally be used within 1 week as oxygen will degrade the active concentration over time. When using in an open day tank, mild agitation should be used only to prepare the solution; once it is prepared, do not use agitation and monitor the active concentration on a weekly basis. Consult with your SUEZ representative to determine the optimum dilution concentration and solution stability for your application.



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packaging information

BetzDearborn DCL95 is a powdered material, available in a variety of containers and delivery methods. Contact your SUEZ representative for details.

safety precautions

A Material Safety Data Sheet containing detailed information about this product is available on request.

materials compatibility

Corrosion-resistant equipment, should be used for the storage, preparation, and use of this product per the following compatibility chart:

Rating	Material
A	Butyl, Viton A, Buna N, EPR, Natural Rubber, Viton Lithurge, Polyethyl HD & LD, PVC Kynar, Nylon, Polyethyl HDCL, Polypropylene, Polysulfone, Teflon
B	Hypalon, Neoprene, Tygon
C	
X	LCS, LB, Al, SS

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