

Technical Data Sheet

Version: 2.0
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Date: 18 / 6 / 2026



Item Name:

MSD 450

PRODUCT INFORMATION

Chinese Name:	复合二硅酸钠
Commodity Name:	MSD 450
Chemical Name:	Modified Sodium Disilicate
Other Name:	Complex Sodium Disilicate, CSDS, MDS
CAS No.:	1344-09-8
Molecular Formula:	$\text{Na}_2\text{O} \cdot 2\text{SiO}_2$
H.S.Code:	38249999.99

PRODUCT DESCRIPTION

Good capability to soften water; Good performance in low-temperature water; Environmental friendly; Strong pH buffering ability; Can be used in different processing methods of detergent powder; Compatible with various surfactants; Compatible with various bleaching agent; Anti-sediment.

TECHNICAL SPECIFICATION

Index	Granular	Powder
Bulk density by g/cm^3	0.4 - 0.5	0.5 - 0.6
SiO_2 by wt %	25 min	
Ca^{2+} exchange capacity (CaCO_3) (mg/g)	450 min	
pH value (25 °C, 1% solution)	12 max	
Moisture by wt %	5 max	
Whiteness by wt %	85 min	

GRANULOMETRY (S=size by wt %)

Distribution	Granular	Powder
S > 50 mesh	18-25	0-5
80 < S < 50 mesh	30-40	18-27
80 < S < 100 mesh	18-25	40-50
S < 100 mesh	25 max	25 min

MAIN APPLICATION

Textile and dyeing industry; Stabilizer of hydrogen peroxide; Industrial cleaning auxiliary; Porcelain industry.

Function in detergent system: Replacing STPP to make low phosphor and phosphors-free detergent powder.

PACKING, LOADING AND SHELF LIFE

Packing: 25kg, 650kg PP bag with PE liner

Loading: 27.5mt per 40'HQ for 25kg bags; 26mt per 40'HQ for 650kg bags

Shelf Life: 24 months when stored in cool, dry and ventilated warehouse, away from incompatible materials.

DISCLAIMER

The information provided in this data sheets is for informational purposes only is considered reliable, but Rawchem doesn't guarantee how any other products associated with this information will behave in combination with variables to other matters. It's recommended to make adaptations to local working conditions and to the raw material to be used.

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PRODUCT IMAGE



Granular Pic

* The image shown here is indicative only. The actual product may differ.



Powder Pic

PACKING, STORAGE AND LOADING



* 650kg PP bag with PE liner



* Storage Pic



* Loading Pic

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