

Technical Data

VERSENEX™ 80 CHELATING AGENT

Product Name

VERSENEX™ 80 Chelating Agent

Product Availability

North America, Latin America, Pacific

Applications

cleaning products, photography, polymerization, pulp and paper, scale removal and prevention

Active Ingredient Name

Pentasodium diethylenetriaminepentaacetate

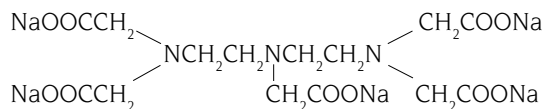
CAS Number

140-01-2

Chemical Formula

$C_{14}H_{18}N_3O_{10}Na_5$ or
 $(NaOOCCH_2)_2NCH_2CH_2N(CH_2COONa)CH_2CH_2N(CH_2COONa)_2$

Chemical Structure



Molecular Weight

503.1

Other Names

Na₅DTPA, DTPA

Description

VERSENEX™ 80 Chelating Agent is an aqueous solution of the pentasodium salt of diethylenetriaminepentaacetic acid, Na₅DTPA. VERSENEX™ 80 Chelating Agent should be considered for use when: (1) the chelant will be used in the presence of oxidizers such as peroxide; (2) when metal chelates of greater stability or solubility are sought; or (3) when VERSENE™ 100 chelating agent has shown limited utility.

Typical Properties†

Equivalent Chelation Value	80mg as CaCO ₃ per gram of VERSENEX™ 80	
Equivalent Chelation Capacity	One gram of VERSENEX™ 80 has the equivalent chelation capacity of 0.8 mmoles of DTPA	
Metal Chelation Capacity	Parts chelant per part metal (w/w)	
Ca	31.2	
Mg	51.5	
Fe	22.4	
Cu	19.7	
Mn	22.8	
% Assay	40.2 wt% as Na ₅ DTPA	
Appearance	Light, straw-colored liquid	
Specific Gravity at 25/25° C	1.3	
Bulk Density	1310 kg/m ³ or 10.9 lb/U.S. gal.	
Color	250 maximum (APHA)	
pH	11.0-11.8 (1 wt% solution)	
Viscosity, Centistokes	Temperature	Viscosity, Centistokes
	0°C/32°F	132
	20°C/68°F	33
40°C/104°F	13	
Water Solubility	Completely miscible	

† The data provided for these properties are typical values, intended only as guides, and should not be construed as sales specifications.

To Learn More, Contact Us:

To learn more about VERSENE™ Chelating Agents, contact the Dow location in your area, listed below:

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Or visit us at:	www.versene.com

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