

VerdiPhos DN7

DTPMP Na₇ • HEPTASODIUM SALT • LIQUID

Chemical name	Heptasodium salt of Diethylene Triamine Penta (Methylene Phosphonic Acid)
Common name	DTPMP Na ₇ / DTPMP heptasodium salt
CAS No.	68155-78-2 (7-Na)
Molecular formula	C ₉ H ₂₁ N ₃ O ₁₅ P ₅ Na ₇
Molecular weight	727.07 g/mol
Physical form	Red-brown transparent liquid

PRODUCT DESCRIPTION

VerdiPhos DN7 is the heptasodium salt of DTPMP, supplied as an aqueous liquid. It is a scale inhibitor, high-performance chelating/sequestering agent and effective barium sulfate scale inhibitor. It is suitable for cooling-water treatment, peroxide bleaching stabilization, detergent auxiliaries, industrial and municipal cleaning, geothermal water treatment and oilfield scale control.

TYPICAL TECHNICAL SPECIFICATIONS

Parameter	Unit	Specification
Active content (as DTPMPA)	%	24.0 - 26.0
Active content (as DTPMP·Na ₇)	%	30.5 - 33.0
Total phosphoric acid (as PO ₄ ³⁻)	%	19.7 - 20.7
pH (1% aqueous solution)	—	7.0 - 9.0
Specific gravity at 20°C	g/cm ³	1.24 - 1.34
Chloride (as Cl ⁻)	%	5.0 max
Iron (Fe)	mg/L	20 max
Appearance	—	Red-brown transparent liquid

Key applications	Cooling-water treatment • Peroxide bleach stabilization • Detergent auxiliaries • Industrial and municipal cleaning • Geothermal water treatment • Oilfield water and scale control • Chelation/sequestration • Barium sulfate scale inhibition
Storage & handling	Store in a cool, dry, shaded and well-ventilated area. Keep containers tightly closed when not in use. Avoid contact with skin and eyes. Use suitable PPE during handling; if contact occurs, flush thoroughly with plenty of water.



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