

Technical Data Sheet

Version: 2.0
Page 1, Total 1

Date: 18 / 6 / 2026



Item Name:

PBTC

PRODUCT INFORMATION

Chinese Name:	2-磷酸丁烷-1, 2, 4-三羧酸
Commodity Name:	PBTC
Chemical Name:	2-Phosphoobutane-1,2,4-Tricarboxylic Acid
Other Name:	PBTCA
CAS No.:	37971-36-1
Molecular Weight:	270.13
Molecular Formula:	C ₇ H ₁₁ O ₉ P

PRODUCT DESCRIPTION

PBTC is used as corrosion inhibitor and scale inhibitor, it is a water treatment agent with high scale inhibitor and corrosion inhibitor performance, strong chemical stability and low toxicity. Under the condition of high temperature, high hardness, high alkalinity, PBTC also has good corrosion inhibition performance, and Ca²⁺, 2 n²⁺, Mg²⁺ plasma has excellent complexation ability. It has a good synergistic inhibition effect with zinc salt and polyphosphate. Can be used in petroleum, chemical, power generation, industrial boiler water treatment. The concentration ratio of circulating cooling water can be increased to more than 7. It can be used as chelating agent and metal cleaning agent in detergent industry.

TECHNICAL SPECIFICATION

Index	Standard
Appearance	Clear, colorless to pale yellow aqueous solution
Active acid by wt %	50.0 min
Phosphorous acid (as PO ₃ ³⁻) by wt %	0.5 max
Phosphoric acid (as PO ₄ ³⁻) by wt %	0.2 max
pH (1% water solution)	1.5 - 2.0
Density (20°C) g/cm ³	1.27 min
Fe by mg/L	10.0 max
Chloride by mg/L	10.0 max

PACKING, LOADING AND SHELF LIFE

Packing: 200L plastic drum, IBC(1000L)

Loading: 24mt/20'fcl

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.