



## PRODUCT IDENTIFICATION

Description
Carboxyl C5 phosphonic acid is an alkyl chemical with a carboxylic acid function and a phosphonic acid function.

Reference	Designation	CAS Number
SP-3-10-006	Carboxyl C5 Phosphonic Acid	5650-84-0

Formula
$\text{HO}_2\text{C}-\text{C}_4\text{H}_8-\text{PO}(\text{OH})_2$

## THEORETICAL PHYSICAL / CHEMICAL PROPERTIES

<b>Physical Aspect</b>	White Powder
<b>Molecular Weight (g/mol)</b>	182,11
<b>Composition (wt %)</b>	C 33,0 H 6,1 O 43,9 P 17,0

<b>Boiling Point (°C)</b>	450 (± 47)
<b>Melting Point (°C)</b>	124 - 126
<b>Solvents</b>	Water
<b>pKa</b>	First acidity 2,35 Second acidity 4,70 Third acidity 8,07



## NMR SPECTRA



