Marketech International, Inc.

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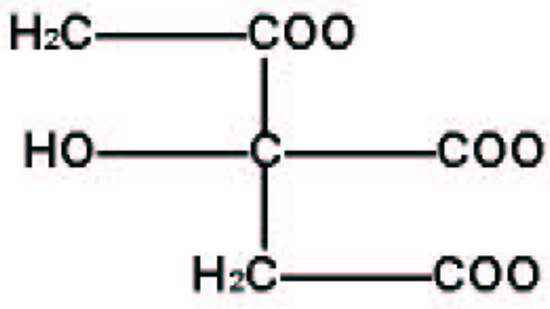
TECHNICAL DATA

CITRIPURE®

(99.999+ PURE 10% AQUEOUS CITRIC ACID)

Structural Formula:



Empirical Formula: $C_6H_8O_7$

Synonyms: 2-hydoxy-1,2,3-propanetricarboxylic acid, â – hydroxytricarballylic acid

Description: CITRIPURE® is an odorless, colorless and optically clear aqueous solution of ultra pure citric acid. It is a relatively strong organic acid, as indicated by the value of the dissociation constants, which forms complexes with many divalent- and trivalent ions. CITRIPURE® is an especially effective chelating agent for copper, iron and nickel ions. This tricarboxylic acid is utilized in numerous technological applications for chelation, buffering pH adjustment, derivatization, etc.

ADVANTAGES of CITRIPURE®

Convenient - Already in solution
Exceptional Efficiency
Unequalled Safety

Properties:

$K_1 = 8.2 \times 10^{-4}$ at 18°C $pK_1 = 3.128$
$K_2 = 1.8 \times 10^{-5}$ at 18°C $pK_2 = 4.761$
$K_3 = 3.9 \times 10^{-7}$ at 18°C $pK_3 = 6.396$

Freezing Point	-12°C
Boiling Point	100.3°C
pH	1.55
Density	1.044 g/mL (20°C)

Typical Impurities in CITRIPURE® - ppb

Al	Ca	Cr	Cu	Fe	Pb	Mg	Ni	K	Na	Zn
0.19	0.16	0.67	< 0.05	0.11	0.05	0.16	< 0.05	< 0.01	0.11	0.078

Applications for CITRIPURE®

Cleaning of Silicon Wafers
Etching of GaAs, AlGaAs, AlAs, etc.
Preparation of High Purity pH Buffers
Synthesis of Ultra Pure Inorganic, Organometallic, and Organic Compounds
Biotechnological Applications
Electroplating and Electroless Plating of Numerous Metals: Sb, Cr, Cu, Fe, Pb, Mn, Mo, Ni, Pd, Rh, Ag, and W