



# Uniphos Chemicals

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## XF-331 (HPA)

### All-organic Corrosion Inhibitor

**XF-331(HPA)** is a unique all-organic corrosion inhibitor specially developed to meet the demands of modern cooling and water systems. In combination with stabilizing and dispersing additives, it is a powerful tool in the formulation of high performance corrosion inhibitor programs. With XF-331, you could get improved corrosion performance and a far better “cost to use” profile. XF-331 can restore the profitability of water treatment programs hit by spiraling sodium molybdate costs.

**In a word, XF-331 has below advantages:**

- A well-known ferrous metal corrosion inhibitor
- Cost effective alternate to sodium molybdate
- Good biodegradability

<b>Abbreviation</b>	HPA or HPAA
<b>Chemical Name</b>	Hydroxyphosphonoacetic Acid
<b>Molecular Formula</b>	C <sub>2</sub> H <sub>5</sub> O <sub>6</sub> P
<b>Molecular Structure</b>	$  \begin{array}{c}  \text{OH} \\    \\  \text{HO}-\text{P}-\text{CH}-\text{COOH} \\     \quad   \\  \text{O} \quad \text{OH}  \end{array}  $
<b>Molecular Weight</b>	156
<b>CAS Number</b>	23783-26-8

### Typical Properties

<b>Appearance</b>	Dark brown liquid
<b>Solids content, %</b>	48.0 – 52.0
<b>Specific gravity @ 20°C, g/cm<sup>3</sup></b>	≥1.3
<b>pH, 1% solution</b>	≤3.0
<b>Orthophosphate, %</b>	2.0 Max.

### Packaging

PE drum or IBC/Tote