

Enviro-Syn<sup>®</sup> HCR-3000<sup>®</sup> a Dorf Ketal Technology, is a strong environmentally-friendly Synthetic Acid<sup>™</sup> solution, designed to reduce the risks associated with exposure, corrosion, and negative HSE properties commonly linked to HCl.



### APPLICATIONS

- ✓ Formation stimulation, scale removal and workover treatments
- ✓ High temperature
  - SAGD
  - CSS
  - Geothermal
- ✓ Ideal for applications where a strong acid is required and high temperatures or exotic metals are exposed
  - Chrome/chrome plating-plated
  - Aluminium
  - Copper
  - Brass

### FEATURES & BENEFITS

- ✓ Chloride free
- ✓ Comparable solubilizing capabilities to 20% HCl
- ✓ Minimal reprecipitation at high pH levels (> 4)
- ✓ Blends available up to 220°C (430°F)\*
- ✓ Compatible with typical oilfield elastomers (e.g., Viton, Nitrile and EPDM)
- ✓ Stable corrosion inhibitor (CI) package, free of hazardous chemicals such as formic acid and propargyl alcohol (PA)
- ✓ Non-regulated for transportation

\*Temperature limitations may vary based on specific well conditions

### PHYSICAL PROPERTIES

Specific Gravity:	1.2
Freezing Point:	≈ -30°C (-22°F)
Boiling Point:	> 100°C (212°F)
pH:	< 1.0
Solubility:	Soluble in water

### SUPPORT HSE AND ESG GOALS



Non-corrosive to skin



Non-fuming



Biodegradable



Non-regulated for air, land and sea transport

## TOTAL SOLUBILITY

Table 1. Total solubility of Enviro-Syn HCR-3000 on a variety of scales.

Acid	Scale	Total Solubility (kg/m <sup>3</sup> )	Total Solubility (lb/gal)
20% HCl	CaCO <sub>3</sub>	253	2.1
HCR-3000 Concentrate	CaCO <sub>3</sub>	280	2.3
HCR-3000 Concentrate	CaMg(CO <sub>3</sub> ) <sub>2</sub>	190	1.6
HCR-3000 Concentrate	FeS	170	1.42

NOTE: High temperature corrosion inhibitor loadings can alter total solubilizing ability.

## SAFETY, STORAGE & HANDLING

- ✓ Store in sealed containers, such as plastic pails, lined drums and HDPE IBC totes
- ✓ Fittings and valves should be HDPE, brass or stainless steel
- ✓ Store out of direct sunlight
- ✓ Consult SDS for additional information and PPE requirements
- ✓ Shelf life of > 1 year; confirm corrosion if product sits for > 60 days

**Talk to us today about our revolutionary products available globally.**  
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