



JOHN-HENRY
ENTERPRISES, INC.

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FORMULA 319

Citric Acid Passivation

FORMULA 319 is a non-corrosive, non-oxidizing, environmentally friendly acid solution for passivating stainless steel. Studies have shown that the 'natural' acids in FORMULA 319 are as effective as typical passivation products containing nitric acid in restoring a protective chromium oxide film to the surface of all grades of stainless steel.

Use FORMULA 319 after a 'stripping' cleaning to passivate tanks and other vessels, vats, valves, and other items needing a protective chromium oxide film. Use of this product will conform to ASTM A967. Works well at ambient temperatures, but may be heated up to 160 ° F (71°C) for faster results. Acceptable for immersion use in ultrasonic tanks, as well as fogging inside any stainless steel vessel, such as Food Grade tank containers, road tankers, and IBC's.

Dilute one part FORMULA 319 with 8 parts water. Use with fogging device, or re-circulate with portable spinner.

If heated to 160 ° F (71°C), dilute with 14 parts water.

SPECIFICATIONS FOR FORMULA 319

Appearance.....	Clear, water white liquid
pH.....	4 (at use dilution)
Specific Gravity.....	1.24
Flashpoint.....	None
Viscosity.....	Low
Dilution.....	7-14% in water
Operating Temperature.....	Ambient ~ 160°F (71°C)
Solubility in water.....	Excellent
Rinseability.....	Excellent

HMIS RATINGS

Health	<input type="text" value="1"/>	Flammability	<input type="text" value="0"/>
Phys Haz	<input type="text" value="0"/>	Personal Protection	<input checked="" type="checkbox"/>

PACKAGING

55 Gallon Drums
275 Gal Totes

