



**Clear Solutions USA**

# ClearSol IMR

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## Technical Data Sheet

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### **SURFACTANT FOR IMMERSION, ULTRASONIC & ANODIZING**

#### **DESCRIPTION**

**ClearSol IMR** is a moderate foaming surfactant system which is readily soluble in 50% Caustic Soda solutions and is ideal for immersion and ultrasonic cleaning or as an anodizing agent. In addition it is also stable in mineral acids including hydrochloric, phosphoric and nitric acids. This brand new technology exhibits the following attributes when formulated into cleaners or anodizing solutions:

- Exceptionally low surface tensions less than 17 dynes/cm.
- Moderate foaming – not for use in high-pressure spray or CIP systems.
- Soluble in 50% NaOH, 45% KOH, 25% HCl, 20% HNO<sub>3</sub>, and 85% H<sub>3</sub>PO<sub>4</sub>.
- Immersion Cleaning - Quick dynamic surface tension lowering resulting in fast wetting and spreading on various hydrophobic substrates makes ClearSol IMR an excellent choice for immersion cleaning.
- Ultrasonic Cleaning – Excellent interfacial properties enhance the cavitation properties of ultrasonic cleaners.
- Anodizing Agent – Extremely low surface tensions greatly improve the anodizing process of metals improving their resistance to corrosion and promoting better adhesion for paint primers & glues.
- Does NOT contain any California Proposition 65 listed chemicals.
- Light color with minimal odor.

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## FORMULATION TIPS

For best results ClearSol IMR should be formulated at a 0.5 – 1.0% level **by weight** in the cleaner's concentrate. For example, if a 50% Caustic Soda-Based Cleaner Concentrate is designed then 0.5 – 1.0% ClearSol IMR, or ½ to 1 gallons of ClearSol IMR per 100 gallons of caustic soda (50% solution of sodium hydroxide), would be added.

## SPECIFICATIONS

Appearance	Clear, light amber liquid
Odor	Bland odor
Specific Gravity	1.071
pH (as is)	7.5 – 9.5

## PERFORMANCE PROPERTIES

Surface Tension, 300 ppm ClearSol IMR in 3% NaOH < 17 dynes/cm

## STANDARD PACKAGING

ClearSol IMR is available in 55-gallon drums and bulk packaging.

## SHELF LIFE

ClearSol IMR has a shelf life of 2 years.