



**Clear Solutions USA**

# ClearSol CIP ETOH-GR PreBatch 20+

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## Technical Data Sheet

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**CHELATING AGENT ADDITIVE WITH GRAS APPROVAL FOR ETHANOL PLANT CIP CLEANING (UP TO 20+ GRAINS HARDNESS)**

### **DESCRIPTION**

**ClearSol CIP ETOH-GR PreBatch 20+** is a formulated hard water control additive which contains GRAS approved ingredients for ethanol plant CIP cleaning when used under normal operating conditions (see Formulation Tips). ClearSol CIP ETOH-GR PreBatch 20+ is readily soluble in up to 50% Caustic Soda for preparing chelated caustic-based cleaner concentrates. These concentrated cleaners are compatible in up to 25 grains of water hardness & provide exceptional hard water control technology for excellent fermenter tank cleaning.

When these chelated caustic concentrates containing ClearSol CIP ETOH-GR PreBatch 20+ are diluted to typical 5-8% sodium hydroxide (NaOH) cleaning solutions, they will greatly improve ethanol plant CIP systems by improving yield, lowering maintenance costs, reducing cleaning cycle times & production stops. This innovative, brand new technology exhibits the following attributes:

- GRAS approved ingredients for ethanol plant CIP cleaning of fermenters.
- Significantly improves ethanol plant CIP systems by improving yield, lowering maintenance costs, reducing cycle times & production stops.
- Controls hard water up to 25 grains (430 ppm) hardness.
- Some ClearSol CIP ETOH-GR PreBatch 20+ residue may remain in the dried distillers grain which may be incorporated into animal & fish feeds.

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## FORMULATION TIPS

For best results ClearSol CIP ETOH-GR PreBatch 20+ should be added at **10% by weight** into **90% by weight** caustic soda (sodium hydroxide) to formulate the concentrated caustic cleaner. This cleaner would then be diluted and maintained between 5-8% sodium hydroxide (NaOH) for ethanol plant CIP cleaning of fermentors.

## SPECIFICATIONS

Appearance	Clear, light amber liquid
Odor	Bland odor
Specific Gravity	1.15
pH (as is)	3.0 – 4.0

## STANDARD PACKAGING

Available in 55-gallon drums, 275 & 330-gallon totes.

## SHELF LIFE

ClearSol CIP ETOH-GR PreBatch 20+ has a shelf life of 2 years.