

## CLEARAL 121 MICROBIOCIDES

Chemstream's Clearal 121 is a broad spectrum microbiocide that is extremely effective for use in oilfield applications. It disinfects Sulfate Reducing Bacteria (SRB), Acid Producing Bacteria (APB), and Total Aerobic Bacteria (TAB) and well as many other aerobic and anaerobic species.

### Benefits

Chemstream's Clearal 121 provides a residue free formation, prevents "sour" oil and gas related to H<sub>2</sub>S issues, and protects downhole and surface equipment from the by-products produced by harmful bacteria. Chemstream's experienced oilfield staff and lab services can conduct biocide efficacy studies with the client's specific water to confirm selection and product loading to mitigate microbiological issues.

### Compatibility

Chemstream's Clearal 121 can be mixed directly into the frac blender tub or pump system and mixing tanks on coil units. Clearal 121 can also be fed directly into a hopper on work over applications. Clearal 121 is also very effective for controlling bacteria issues associated with injection well applications.

### Product Dosage

Chemstream's Clearal 121 is normally effective at dosages ranging between 0.2 – 0.4 GPT (200 – 400 ppm). Chemstream will conduct a biocide efficacy study on the water source to confirm actual dosage requirements.

### Handling/Storage

Store in a cool, dry, well ventilated and shaded area, away from heat sources and incompatible materials. To maintain product quality, store product at temperatures below 104°F (40°C).

Refer to the Safety Data Sheet (SDS) for handling and hazard data.

### Physical Properties

Appearance .....	clear yellow to amber liquid
Product Density .....	9.34lbs./gal
Flash Point .....	329°F
Freezing Point .....	< -20°F
pH (neat) .....	2.5 – 5.5
Solubility .....	Dispersible in water

### Ordering Information

Available in totes, bulk, or Isotainers. Contact information is below.

Call us at 724-915-8388, or visit us on the web at [www.chemstream.com](http://www.chemstream.com)

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Before using this product, the user is advised and cautioned to make its own determination and assessment of the safety and suitability of the product for the specific use in question and is further advised against relying on the information contained herein as it may relate to any specific use or application. It is the ultimate responsibility of the user to ensure that the product is suited and the information is applicable to the user's specific application. Chemstream does not make, and expressly disclaims, all warranties, including warranties of merchantability or fitness for a purpose, regardless of whether oral or written, express or implied, or allegedly arising from any usage of any trade or from any course of dealing about the use of the information contained herein or the product itself. The user expressly assumes all risk and liability, whether based in contract, tort or otherwise, about the use of the information contained herein or the product itself. Further, information contained herein is given without reference to any intellectual property issues, as well as federal, state or local laws which may be encountered in the use thereof. Such questions should be investigated by the user.