

# Armohib CI-209

## Imidazoline

Armohib® CI-209 is the imidazoline reaction product of tall oil fatty acid and diethylenetriamine.

### Specifications

Appearance	Green amber liquid at 25°C
Total Amine	4.5-4.8 meq/g
Moisture	≤ 0.20 %
pH	10.0-12.0 (5% in 3:1 IPA/H <sub>2</sub> O)

### Characteristics

Appearance	Liquid dark amber at 25°C
Brookfield viscosity, 77°F	200 cps
Density	7.8 Lbs/Gal at 25°C
Flash point	≥93.3 C
Odor	Amine
pH	11 (5% in 3:1 IPA/H <sub>2</sub> O)
Pour point	≤ -1.1 °C
Solubility: 10% in Aromatic 150	Soluble
Solubility: 10% in Heavy Aromatic Naphtha	Soluble
Solubility: 10% in Isopropyl Alcohol	Soluble
Solubility: 10% in Kerosene	Soluble
Solubility: 10% in Toluene	Soluble
Solubility: 10% in Water	Insoluble
Solubility: 10% in Xylene	Soluble
Solubility: 50% in Aromatic 150	Soluble
Solubility: 50% in Heavy Aromatic Naphtha	Soluble
Solubility: 50% in Isopropyl Alcohol	Soluble
Solubility: 50% in Kerosene	Soluble
Solubility: 50% in Toluene	Soluble
Solubility: 50% in Water	Insoluble
Solubility: 50% in Xylene	Soluble

#### Notes:

Typical Data are based on our own measurements or derived from the literature. They do not constitute part of the delivery specification.

## Applications

Armohib® CI-209 is a complex amidoamine. Corrosion inhibitors formulated with this unique organic base display high film persistency against the attack of severely corrosive fluids and gases in sour (H<sub>2</sub>S) and sweet (CO<sub>2</sub>) environments. Because the product can be formulated into oil-soluble, oil-soluble/water-dispersible or water-soluble inhibitors, the finished formulations readily disperse in hydrocarbon solvents, water and brine. As a result, corrosion inhibitors formulated with Armohib® CI-209 are able to work effectively in a wide range of tough chemical and physical environments, providing the formulator with superior versatility and low inventory requirements.

## Additional information

Armohib® CI-209 is a corrosion inhibitor base developed especially to meet the needs of the oil and gas industry. Armohib® CI-209 is a high quality base imidazoline that has the potential to be formulated to meet a broad spectrum of inhibitor requirements. Armohib® CI-209 formulations will provide excellent protection in most treating environments. Depending upon the method of preparation, Armohib® CI-209 formulations are effective in producing well, pipeline and water handling applications.

All information concerning this product and/or suggestions for handling and use contained herein are offered in good faith and are believed to be reliable. Nouryon, however, makes no warranty as to accuracy and/or sufficiency of such information and/or suggestions, as to the product's merchantability or fitness for any particular purpose, or that any suggested use will not infringe any patent. Nouryon does not accept any liability whatsoever arising out of the use of or reliance on this information, or out of the use or the performance of the product. Nothing contained herein shall be construed as granting or extending any license under any patent. Customer must determine for himself, by preliminary tests or otherwise, the suitability of this product for his purposes. The information contained herein supersedes all previously issued information on the subject matter covered. The customer may forward, distribute, and/or photocopy this document only if unaltered and complete, including all of its headers and footers, and should refrain from any unauthorized use. Don't copy this document to a website.

Armohib® is a registered trademark in many countries. For more information, please visit our website at [www.nouryon.com](http://www.nouryon.com).

The logo for Nouryon, featuring a stylized blue 'N' followed by the word 'ouryon' in a blue sans-serif font.