



ENERGY &
RESOURCES

Demulsifiers

Effective solutions for challenges
in crude oil separation.



INDORAMA
VENTURES

Indispensable Chemistry

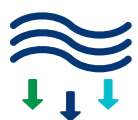




Demulsifiers

In the oil production process, emulsions occur naturally due to emulsifying agents present in oil, water, and sediments. This can adversely affect the crude oil quality and process productivity. Therefore, it is imperative to effectively treat this emulsion to ensure efficient recovery and maintain the produced oil quality.

Indorama Ventures offers a comprehensive line of **emulsion breaking** components designed to meet every need in the emulsion breaking process. These components perform several functions, including **droppers, treaters, polishers, dryers and desalters**. By combining these chemical solutions, rapid water separation, coalescence and flocculation of smaller water droplets are facilitated, thereby increasing the dehydration of crude oil and ensuring its quality.



DROPPERS
Improve the rate and speed of the water droplets coalescing process



TREATERS
Enhance interface quality, break secondary emulsions



POLISHERS
Boost the water quality and speed water drop



DRYERS
Induce flocculation of fine emulsion droplets



DESALTERS
Reduce the salinity into the oil phase and improve the water drop

Technical Datasheet

The effectiveness of demulsifiers is significantly affected by their solubility and compatibility in different solvents. Dissolution tests in **water, xylene, isopropyl alcohol (IPA), diesel**, among others, are a determining factor in choosing the ideal product, ensuring its effectiveness and consistent results in various challenging scenarios.

Along with solubility, our demulsifiers are evaluated based on other critical factors such as **flash point** and **viscosity**. Furthermore, given the complexity and variability observed between different oils, standard tests help identifying the performance characteristics of each demulsifier in **Primary, Secondary or Tertiary** functionality according to the most observed requirement.



GUIDANCE FOR BETTER EVALUATION OF THE INDORAMA PORTFOLIO IN 3 STEPS

1. Run a screening using the alkoxyated resins to identify the best **dropper**.
2. Combine the **dropper** with the **treater** and **polisher** as needed. **Dropper to Treater/Polisher** ratios generally range from 75:25 to 50:50.
3. To refine the formulations, anionic surfactants can also be used in concentration below 5%.

Consider **ULTROIL® HFS 135** solvent to obtain a nonflammable and organic solvent free formulation.

Technical Datasheet



Product	RSN ¹	Function						Active content ² (%wt)	Appearance (25°C)	Flash Point (°C)	Flash Point (°F)	Solubility ³			
		Droppers	Treaters	Polishers	Dryers	Desalters	Sludge treaters					Water	Xylene	IPA	Diesel
PROPRIETARY															
ULTROIL® EB 6010	11	✓	✓	□	△	□		80	Liquid	8	46	D	D	S	D
ALKOXYLATED RESINS															
ULTROIL® EB 1020	8	✓						80	Viscous Liquid	32	90	I	S	S	S
ULTROIL® EB 1030	14	✓						80	Viscous Liquid	34	93	I	S	S	S
ULTROIL® EB 1040	16	✓		△				65	Viscous Liquid	39	102	I	S	S	S
ULTROIL® EB 1055	19	✓				✓		90	Viscous Liquid	28	82	I	S	S	S
EO/PO COPOLYMERS															
SURFONIC® OFD 101	11	□	✓	△				100	Liquid	>100	>212	I	D	S	D
SURFONIC® OFD 328	9*	□	✓	△				100	Liquid	>100	>212	I	D	S	D
SURFONIC® OFD 335	10*	□	✓	△				100	Liquid	>100	>212	I	D	S	D
SURFONIC® POA-17R2	17	□	✓					100	Liquid	>100	>212	D	I	S	I
ULTROIL® EB 2010	19	□	✓					100	Liquid	>100	>212	S	S	S	S
ULTROIL® EB 2020	18	□	✓					100	Liquid	>100	>212	S	S	S	S
ULTROIL® EB 2030	21	□	✓					100	Liquid	>100	>212	S	S	S	S
ULTROIL® EB 3010	18	□	△	✓				100	Viscous Liquid	>100	>212	S	S	S	S
ULTROIL® EB 3020	21	✓	△	✓				100	Viscous Liquid	>100	>212	S	S	S	S
ULTROIL® EB 4050	9					✓		97	Liquid	65	149	I	S	S	S
ALKOXYLATED POLYAMINES															
SURFONIC® OFD 150	32	△	✓					100	Liquid	>100	>212	S	I	S	I
SURFONIC® OFD 301	17*	△	✓					100	Liquid	>100	>212	S	I	S	I
SURFONIC® OFD 302	16*	△	✓					100	Liquid	>100	>212	S	I	S	I
ANIONIC															
SURFONIC® OFD 750	-					✓		70	Liquid	39	102	S	I	S	I
XOF-22A	-					✓		92	Liquid	>100	>212	S	I	S	I
XOF-26A	-					✓		92	Viscous Liquid	>100	>212	D	D	S	D
LAVREX® 200 BP	-					✓		98	Liquid	>100	>212	S	S	S	S

✓ - Primary △ - Secondary □ - Tertiary
S - Soluble D - Dispersible I - Insoluble

¹RSN values are based on dioxane/toluene as solvents, and temperature between 18-20 °C.
²RSN values are based on toluene/ethylene glycol dimethyl ether as solvents, and temperature 25 °C.
³Infrared radiation. 1g @ 105 °C, until mass loss stabilization.
⁴40% active @ 20-25 °C during 24 hours.



DISCLAIMER

This information is provided in good faith, based on Indorama Ventures' current knowledge of the subject and is purely indicative. No information, including suggestions for using the products, should preclude experimental testing and verification, which are essential to ensuring the suitability of the products for each specific application. Consult the contact from your region or country regarding the availability of each product. All users must also respect local laws and obtain all the necessary permits. When handling the product, consult the safety data sheet. If you have any questions or additional needs, please contact Indorama Ventures through our customer service channels.

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