

Amodrill® 1000 Synthetic Olefin

Amodrill® 1000 synthetic olefin is an aromatic free, unsaturated acyclic hydrocarbon produced from ethylene. It has a low-viscosity and also meets the stringent EPA's NPDES general permit which allows for the discharge of cuttings in the Gulf of Mexico. This fluid boasts excellent environmental properties with respect to biodegradation and low aquatic toxicity.

In addition Amodrill® 1000 also meets the OSPAR standard for biodegradability and toxicity.

This product is a base component in formulations designed to improve the performance and wellbore stability expected from conventional mineral oil-based muds. Performance improvements include higher penetration rates, longer bit life, increased thermal stability and lower over-all fluid loss. It has the added advantage of being cited in the U.S. EPA Effluent Performance Standards for off-shore disposal of cuttings in U.S. waters.

Typical Physical Properties¹

	Value	Test Method
Kinematic Viscosity, cSt		
40 °C	3.0	ASTM D-445
100 °C	1.3	ASTM D-445
Pour Point	- 12 °C	ASTM D-97
Flash Point	137 °C	ASTM D-92
Aniline Point	78 °C	ASTM D-611
Density		
15.6 °C, g/mL	0.790	ASTM D-4052-11
60 °F, lb/gal	6.59	ASTM D-4052-11

¹Typical properties will vary within specification limits.

Environmental Test Properties

Ecotoxicity Species	Toxicity	Method
Corophium volutator	>10,000 mg/kg	LC50 (10-d)
Mysid shrimp		
(Formulated mud) ppm (SPP)	570,000	LC50 (96-h)
(10% in GM7) ppm (SPP)	124,000	LC50 (96-h)
Stock Limitation Requirement Data	Reported Value	Method
Biodegradation (Anaerobic Closed Bottle, 275 d)	≤ 1.0	Modified ISO 11734
Leptocheirus plumulosus	≤ 1.0	LC50 (10-d)
PAH (Polynuclear Aromatic Hydrocarbons)	<10 mg/kg	EPA 1654A
Biodegradability, Aquatic Environment	Biodegradation	Method
Marine Aerobic Ultimate, 28 d	66% ThO ₂	BODIS
Freshwater Aerobic Ultimate, 28 d	77% ThCO ₂	OECD 301B

² Theoretical Oxygen Demand

Technical information contained herein is furnished without charge or obligation, and is given and accepted at recipient's sole risk. Because conditions of use may vary and are beyond our control, INEOS makes no representation about, and is not responsible or liable for the accuracy or reliability of data, nor for toxicological effects or Industrial Hygiene requirements associated with particular uses of any product described herein. Nothing contained in this document shall be considered a recommendation for any use that may infringe patent rights, or an endorsement of any particular material, equipment, service, or other item not supplied by INEOS. The "Properties" and "Applications" listed in this document are not specifications. They are provided as information only and in no way modify, amend, enlarge, or create any specification or warranty, and ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE EXCLUDED.

The name INEOS is a trademark of INEOS Capital Limited.