

Product Name:**NiQuan Energy GTL Synthetic Non-Aqueous Base Fluid**
NiQuan
ENERGY
Product Category:

GTL Synthetic Non-Aqueous Base Fluid for Synthetic Base Mud (SBM)

Description:

NiQuan Energy's GTL Synthetic Non-Aqueous Base Fluid (NABF) is an on-spec and environmentally friendly product. Biodegradable and with very low toxicity, GTL Synthetic Non-Aqueous Base Fluid meets OGP Group III standards and is an ideal base fluid for Synthetic Drilling Muds¹.

NiQuan Energy's GTL Synthetic NABF has a low pour point, low viscosity and a narrow boiling range which improves its rheological performance. It has near-zero sulfur content and is characterized by very low aromatics and greatly reduced nitrogen content. With a high flash point and low absorbancy, GTL Synthetic NABF is safe to store and handle.

NiQuan Energy's GTL Synthetic NABF is produced using Gas-to-Liquids technology featuring the Fischer-Tropsch catalytic process; a cost-efficient and low emissions means of producing Group III NABFs. During an extensive testing program carried out by Intertek Laboratories in Houston, Texas, its performance as a base for the preparation of drilling fluids was in accordance with industry-accepted parameters.

	Property	Unit	Value	Test Method	
Chemical Properties	Total Paraffin	%m	97	ASTM D1319/GC	
	Total Aromatic	%vol	< 0.5	ASTM D391	
	Sulphur Content	ppm	0.2	ASTM D4294 / ASTM D5453	
Physical Properties	Saybolt Color		> +30	ASTM D156	
	Boiling Range			ASTM D86	
		IBP	°C	175	
		90% Recovered	°C	310	
	Aniline Point		°C	87	ASTM D611
	Pour Point		°C	-18	ASTM D97
	Flash Point		°C	75	ASTM D93
	Vapor Pressure		psi	< 0.02	ASTM D6378
	Kinematic Viscosity @ 40°C		cSt	2.2	ASTM D445
	Kinematic Viscosity @ 100°C		cSt	1.32	ASTM D445
Environmental Properties	<i>Biodegradability</i>	Unit	Expected Value	Test Method	
		Aerobic (Marine Water)	% after 28 days	75	OECD 306
		Aerobic (Soil)	Half-life (days)	21	OECD 307
	<i>Water Column Toxicity *</i>				
		Acartia Tonsa	mg/L	> 1,000 (non-toxic)	PARCOM, ISO 14569
		Skeletonema Costatum	mg/L	> 1,000 (non-toxic)	OSPAR / PARCOM
		Mysidopsis Bahia	ppm	> 1,000,000 of 10% SPP (non-toxic)	US-EPA 2001 40 CFR 435
		Pagrus Auratus	mg/L	7d LC50: > 100,000 (non-toxic)	US-EPA 2003
		Daphnia Magna	mg/L	> 1,000 (non-toxic)	OECD 202
		Brachydanio Rerio	mg/L	> 1,000 (non-toxic)	OECD 203
	<i>Sediment Organism Toxicity</i>				
		Corophium Volutator	mg/kg	> 20,000	PARCOM Protocol 1995
	<i>Bioaccumulation Potential</i>				
	Octanol-Water Partition Coefficient		Log Kow > 6.5	OECD 117	

* Results reflect expected values as water Column toxicity is region specific. As per Trinidad and Tobago's Local Testing Parameters NABF was found to be Biodegradable and non toxic to its relevant marine organism.

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