



CALSIA™ DRILLING FLUIDS

Calumet Specialty Products Partners, L.P., offers a complete line of Calsia™ Drilling Fluids, which are normal/isoalkane drilling mud based fluids that begin with a severe hydrocracking and hydroisomerization process. Calsia Drilling Fluids are available in a wide range of specifications for various drilling applications. Calsia Drilling Fluids are an ideal solution for delivering an environmentally responsible drilling mud base fluid that does not compromise performance.

All Calumet products are produced to the highest technical standards, and Calsia Drilling Fluids meet OGP Group III non-aqueous fluids. These products are also compliant with the EPA Maximum Contaminant Levels (MCLs) for BTEX (benzene, toluene, ethylbenzene, and xylenes) compounds in drinking water.

PRODUCT FEATURES

- Virtually Non-Toxic to Humans and Marine Life
- Readily Biodegradable

BENEFITS

- Provides superior low temperature fluidity in ultra-deep water drilling applications
- No long-term environmental impact
- Effectively used as a
 - Viscosity Modifier
 - Heat String Fluid
 - Diluent for Liquid Mud Additives (LMA)
 - Base Gel Fluid
 - Differential Fluid
 - Rate of Penetration (ROP) Enhancer

TECHNICAL ASSISTANCE

For product or technical questions contact your Sales Representative or Calumet Product Support.

Product Support:
800-437-3188
technical@clmt.com

www.calumetspecialty.com

CALSIA™ DRILLING FLUIDS

PHYSICAL PROPERTIES	METHOD	CALSIA 62	CALSIA 70	CALSIA 80	CALSIA 96	CALSIA 100
TECHNICAL SUMMARY						
Viscosity @ 40°C (cSt)	ASTM D445	2.00	2.00	2.26	2.18	2.31
Density @ 60°F (15°C), kg/L	ASTM D4052	0.7935	0.8230	0.8101	0.8090	0.8109
Flash Point, PMCC (°C)	ASTM D93	70	80	96	98	102
Pour Point (°F)	ASTM D97	-60	-38	-46	-28	-50
Aniline Point (°F)	ASTM D611	171	165	160	170	165
Color	ASTM D156	30	30	30	30	30
BTEX (Detection Limits per EPA Drinking Water MCLs)						
Benzene (5 ppb)	EPA SW-846 8260 B	ND	ND	ND	ND	ND
Toluene (700 ppb)	EPA SW-846 8260 B	ND	ND	ND	ND	ND
Ethylbenzene (1 ppm)	EPA SW-846 8260 B	ND	ND	ND	ND	ND
Xylene (10 ppm)	EPA SW-846 8260 B	ND	ND	ND	ND	ND
Polynuclear Aromatics, 1 ppm	EPA SW-846 8260 B	ND	ND	ND	ND	ND
Aromatics	ASTM D5186 (WT%)	<0.2% Aromatics	<0.2% Aromatics	<0.2% Aromatics	<0.2% Aromatics	<0.2% Aromatics
Paraffin Content, weight %	ASTM D2425	>99.9%	>99.9%	>99.9%	>99.9%	>99.9%
Compliant to U.S. Food & Drug Administration 21 CFR 172.884		PASS	PASS	PASS	PASS	PASS
Sustained Burning Exemption		PASS	PASS	PASS	PASS	PASS
Kauri-Butanol Value	ASTM D1133	27.4	28.0	26.3	25.3	24.6
TOXICOLOGICAL SUMMARY*						
Trout Toxicity			OECD TG 203			
Genetic Toxicity			OECD TG 471			
Aquatic Invertebrate (D. Magna)			OECD TG 20			
Microtox			QSAR - PETROTOX			
Biodegradability			OECD 301 F			
PAH Content		ND	ND	ND	ND	ND

* Compiled using the European Chemicals Agency (ECHA) Database. Updated July 2021.