

Global Oilfield Solutions

Performance Chemicals
for Cementing



 **BASF**
We create chemistry

High Performance Chemicals for Cementing

Imagine enhancing your engineering services with solutions from the world's leading chemical company. When it comes to cementing, BASF offers one of the most comprehensive chemical portfolios in the industry.

Our proven strengths are innovative, sustainable solutions with consistent product quality. Best-in-class well site operations are essential for maximizing the recovery of oil and gas reserves while minimizing the impact on the environment. Specialty chemicals that impart unique capabilities and functionality are an integral part of this goal.

BASF provides a broad range of high-quality chemicals to help service companies meet their technical challenges in cementing. By constantly improving the quality and reliability of our chemical solutions, we help service companies meet the industry's overall drive for greater efficiency and productivity.

Discover your possibilities with BASF.





BASF's state-of-the-art dispersants and fluid loss additives ensure a reliable cementing job under difficult conditions.

Cementing	Function	Chemistry	Recommended products
	Dispersants	Polycarboxylate based superplasticizers	Liquiment® 1641F and 5581F
		Polycondensate based dispersants	Liquiment® F-10X
		The standard dispersant for oil well cementing	Liquiment® K3F
		Green dispersant	Liquiment® Bio
	Fluid loss control additives	Tailored blends for a variety of base applications	Polytrol® FL 24, FL 29, FL 32
		Fully synthetic polymers for demanding conditions	Polytrol® FL 34, FL 45, FL 56
	Gas blocking additives	Styrene-butadiene latex	Paragas®
Polyethylenimine		Basoblock ND 614, LD 150, D 623	
Retarders	Fully synthetic retarder for demanding conditions	CemR-10, CemR-80	
Defoamers	Fatty alcohol alkoxyate	Basopur DF 5, DF 9010 F	
Spacer Fluids	Surfactant blend	DisPlus 39	

Please note that not all product versions and types may be available in all regions.

Cementing Portfolio

High Performance Chemicals for Well Cementing

We offer a broad portfolio of specialty chemicals designed to support and enhance the cementing process.

BASF's state-of-the-art cement dispersants improve the slurry rheology such that long range pumping is greatly improved and at the same time water-reduced cement slurries are possible. Fluid loss additives, which are stable against high temperatures and concentrated salt solutions, ensure a reliable cementing job under difficult conditions. BASF's retarders can be synergistically combined with our highly efficient dispersants allowing for time critical cementing jobs under high temperature conditions. Our anti-gas migration additives prevent gas from channelling through the hardening cement and ensure a reliable cementing job. The BASF portfolio is completed by defoamers with outstanding foam control properties.

About Oil Well Cementing

When a section of an oil or gas well has been drilled, metal tubes or casings are introduced and fixed with cement in order to stabilize the well. Also, this cement layer separates different geological formations from each other, which is necessary to prevent the exchange of gas or fluids between the different zones. In contrast to common construction applications, oil well cementing faces additional challenges. Prior to setting, the cement slurry needs to be pumped down through the casing to the bottom of the hole under high temperature and pressure conditions in order to squeeze it upwards in between the casing and formation wall.

Enhance the performance of your cement with BASF's state-of-the-art additives.





How BASF Oilfield Solutions can contribute to a successful job

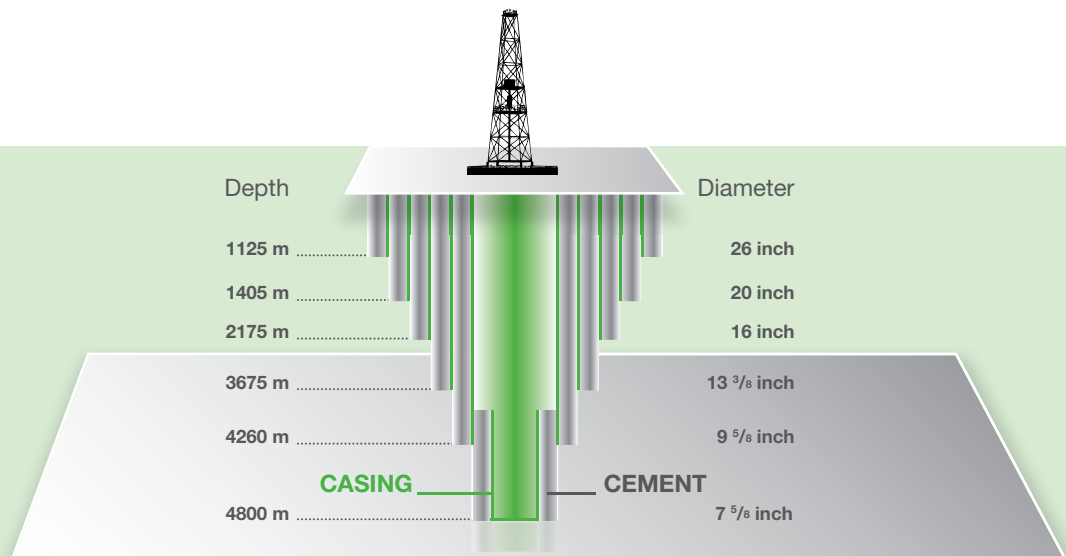
The **Liquiment®** product range includes our state-of-the-art cement slurry disperant for use in a wide range of oil field applications. While lowering the slurry viscosity, rheology is greatly improved for long range pumping. Furthermore, cement slurries with reduced water-to-cement ratios are possible, which results in a high compressive strength for the hardened cement.

Our fluid loss polymers reduce the water loss from the slurry to the formation, which otherwise would lead to undesired effects such as high viscosity. The **Polytrol® FL** line of products offers chemicals for different conditions and requirements such as high temperature stability and salt tolerance up to saturation.

Other chemistries, which also support fluid loss control, are **Basoblock™** styrene-butadiene latices as well as **Parags®** which is a selected polyethylenimine. These products are known to provide gas migration control and, in the case of **Basoblock™**, add elasticity to the cement.

Basopur™ DF 5 and **DF 9010 F** provide outstanding foam control. These products are well proven foam suppressants for a variety of oilfield applications such as drilling, cementing and production operations. Furthermore, to complete the portfolio, **CemR-10** and **CemR-80** are fully synthetic cement retarders for high temperature wells where time is critical. The products interact well with other additives.

Several casings are cemented into the borehole.



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