Global Oilfield Solutions

BASF Coagulant and Flocculant Kit



Diversify Your Options with BASF's Coagulant / Flocculant Portfolio

Introduction

Coagulants are low-molecular-weight polymers. They function by reducing the surface electronic charge on oil droplets and suspended solids enabling closer contact and coagulation. Flocculants are medium- to high-molecular-weight polymers which function by bridging between oil droplets and suspended solids to form agglomerates. Both coagulants and flocculants are used in deoiling (water clarification) and dewatering applications.

For removing residual oil in produced water, slop water, treating waste oil or oil sludge, BASF offers a broad range of water clarifiers (deoilers), covering different molecular weights, ionicities and chemistries.

Solids, in particular fines and ultra fines, can cause severe problems in drilling fluids when allowed to accumulate. If allowed to accumulate, solids below the 3 micron range can cause rheology issues, decrease penetration rates and formation damage. To effectively remove these fine solids it is recommended that certain chemicals, specifically polymeric coagulants and flocculants, be used in conjunction with mechanical equipment.

Function guide

The Alcomer[®] series of polymers contains both low-molecularweight cationic coagulants and a wide range of molecular-weight anionic and cationic flocculants. Simple laboratory experiments can help define the optimum treatment options and our experience has confirmed the success of these treatments in field applications.

Applications

- Process water treatment (classical deoiler application) Only residual oil, no solids
- Slop water treatment
 Low oil content, low solids content

systems and/or reserve pit

- Waste oil treatment
 Variable oil, water and solids content
 Oil sludge
- Low oil content, low water content, high solids content
 Dewatering applications Clear water drilling, control of MBT value and closed





A deoiler test kit is available upon request

Initial recommendation

Coagulants are most effective when diluted to a 1-5% active solution prior to application. They may also be applied neat provided a suitable injection point is selected where rapid mixing with the process stream will occur.

Optimum performance of **flocculants** is obtained when they are first prepared as diluted solutions of less than 0.5% active polymer. Please note: Solid grades are slower to dissolve and require a preparation time of 1-2 hours to ensure complete dissolution.

Products in the Coagulant and Flocculant Kit								Function Availability				
	try.		[%]	ar			I	art	Region			
Product	Chemistry	Product form	Solid content [%]	Molecular weight	lonic type	lonic grade	Coagulant	Flocculant	NA	SA	B	AP
Alcomer [®] 752	Cationic Polyacrylamide	Bead	100	Medium low	Cationic	Low						
Alcomer [®] 755	Cationic Polyacrylamide	Bead	100	Medium low	Cationic	Medium	•			•	•	•
Alcomer [®] 758	Cationic Polyacrylamide	Bead	100	Medium low	Cationic	High						
Alcomer [®] 783	Cationic Polyacrylamide	Liquid	100	High	Cationic	Medium						
Alcomer [®] 811	Cationic Polyacrylamide	Powder	100	High	Cationic	Low				•	•	-
Alcomer [®] 812	Cationic Polyacrylamide	Powder	100	Medium high	Cationic	Low		•	•	•	•	
Alcomer [®] 814	Cationic Polyacrylamide	Powder	100	Medium high	Cationic	Medium		•	•	•	•	•
Alcomer [®] 819	Cationic Polyacrylamide	Powder	100	Medium high	Cationic	High				•	•	
Alcomer [®] 80	Polyacrylamide (PAM)	Powder	100	Very high	Non-Ionic	NA						
Alcomer [®] 24 UK	Partially Hydrolized PAM	Bead	100	High	Anionic	Low						
Alcomer [®] 115	Partially Hydrolized PAM	Powder	100	Very high	Anionic	Medium						
Alcomer [®] 90P	Partially Hydrolized PAM	Powder	100	Ultra high	Anionic	Low						
Alcomer [®] 216	Polyacrylate	Liquid	18	Low	Anionic	Medium	-					
Alcomer [®] 7109	Cationic Polyacrylamide	Liquid	15	Low	Cationic	Very high	-					
Alcomer [®] 7187	Polyamines	Liquid	40	Very low	Cationic	Very high						
Alcomer® 7199	Polyamines	Liquid	50	Very low	Cationic	Very high						
Alcomer® SK	Polyethylenimine	Liquid	25	Medium	Cationic	High						
Alcomer® 7523D	PAC derivatives	Liquid	20	Low	Cationic	Very high						





Additional Coagulant and Flocculant Product Line*								Function		Availability			
	Σ.		8	5			ŧ	It	Region				
Product	Chemistry	Product form	Solid content [%]	Molecular weight	lonic type	lonic grade	Coagulant	Flocculant	NA	SA	B	AP	
Alcomer® DPI	Polyacrylates	Liquid	30	Low	Anionic	Medium	-		•	•	•	•	
Alcomer [®] 888US	Cationic Polyacrylamide	Inv Emulsion	40	High	Cationic	High		•	•	•	•	•	
Alcomer® 7576	PAC derivatives	Liquid	50	Low	Cationic	High							
Basorol [®] RV	Tannin base polymer	Liquid	30	Low	Cationic	High	•			•	•	-	

NA =North America including Canada and Mexico SA = South America including Central America

EU = Europe including Middle East, Africa, CIS AP = Asia Pacific including China, Japan

*Not included in Kit





North America – Global Headquarters

BASF Corporation

Global Oilfield Solutions 3120 Hayes Road Suite 200 Houston, TX 77082 US Phone: +1 800 7941019 Fax: +1 877 2451806

Europe

BASF SE

Global Oilfield Solutions G-EVG/GM – J542 S 67056 Ludwigshafen Germany Phone: +49 621 60-0

Asia

BASF South East Asia Pte. Ltd.

Global Oilfield Solutions 33 Tuas Avenue 11, Singapore 639090 Singapore Phone: +65 6860 7051

South America

BASF S.A.

Global Oilfield Solutions Avenida das Nações Unidas, 14.171 Morumbi 04794-000 São Paulo Brazil Phone: +55 11 2039-3482 Fax: +55 11 2039-2786

Middle East/North Africa

BASF Middle East LLC

Global Oilfield Solutions P. O. Box 2996 Dubai United Arab Emirates Phone: +971 4 8072222 Fax: +971 4 8072149

For further information: oilfieldsolutions@basf.com www.oilfield-solutions.basf.com



The descriptions, designs, data and information contained nerein are presented in good faith, and are based on BASF's current knowledge and experience. They are provided for guidance only, and do not constitute the agreed contractual quality of the product or a part of BASF's terms and conditions of sale. Because many factors may affect processing or application/use of the product, BASF recommends that the reader carry out its own investigations and tests to determine the suitability of a product for its particular purpose prior to use. It is the responsibility of the recipient of product to ensure that any proprietary rights and existing laws and legislation are observed. No warranties of any kind, either express or mplied, including, but not limited to, warranties of merchantability or fitness for a particular purpose, are made regarding products described or designs, data or information set forth herein, or that the products, descriptions, designs, data or nformation may be used without infringing the intellectual property rights of others. Any descriptions, designs, data and nformation given in this publication may change without prior information. The descriptions, designs, data, and information furnished by BASF hereunder are given gratis and BASF assumes no obligation or liability for the descriptions, designs, data or information given or results obtained, all such being given and accepted at the reader's risk. (09/2017)