



BASECHEM

BASECHEM

INNOVATIVE CHEMICALS

Intermediates for Oilfield and
Water Treatment Specialty Chemicals



INTRODUCTION

In the first half of 2024, the newest chemical production and research facility was launched. BASECHEM LLP opened a brand-new, modern chemical production plant in Mangystau, utilizing the best available technology from around the world.

The facility has a production capacity exceeding 20,000 tons per year, focusing on both the domestic market and entering the export market.

BASECHEM LLP began its journey in Kazakhstan with a research and development laboratory founded in Almaty in 2018. Its goal was to create knowledge-based chemical production and to develop and patent a range of chemical products to solve problems across various industries, including oil and gas, petrochemicals, industrial water and wastewater treatment, municipal water and sewage systems, mineral processing, steel manufacturing, pulp and paper, and household products.

We are proud to offer innovative solutions and everyday essentials among our products, producing a wide variety of scientifically formulated chemicals through our advanced facilities. Our professional staff and experienced engineers at BASECHEM LLP provide technical consultation and outstanding customer service.

Years of continuous manufacturing of finished products, engineering supply, formulation, and expertise in utilizing these products are the most valuable assets and honors of our partners. Supplying raw materials and specialty chemical concentrates to companies working in oil & gas fields, petrochemicals, water treatment, and general industries is our new approach to extending our business in scientific and production services.

DEMULSIFIERS

Our BASEDEM product range should be considered as concentrated raw materials, or intermediates, for the preparation and/or formulation of oilfield demulsifiers and dehydrating chemicals.

Synergistic effects in formulated demulsifiers are well known. For instance, blends of intermediates from different chemical groups make better demulsifiers than blends using intermediates from the same family of compounds. Some demulsifier bases have special properties that give them more optimal blending characteristics.

General information				Description	Solubility (b)	
Code	Product form	% Active content	RSN (a)	Function	Water	Aromatic 150
BASEDEM-7700	White paste	100	30-32	Interface, slow water drop, usually cut high, generally used as blending for detail, broad demulsifier base used for wetting properties, good water quality.	S	D
BASEDEM-8600	Amber liquid	78-82	16-18	Fast water drop, most versatile intermediate for covering all treating aspects, usually major portion of formula.	D	S
BASEDEM-3820	Amber liquid	88-92	14-16	Fast water drop, most versatile intermediate for covering all treating aspects, treating high asphaltene oil.	D	S
BASEDEM-3821	Dark amber liquid	86-90	13-15	Fast water drop, most versatile intermediate for covering all treating aspects, treating high asphaltene oil.	D	S
BASEDEM-3830	Amber liquid	88-92	14-16	Fast water drop, most versatile intermediate for covering all treating aspects, treating high asphaltene oil.	D	S
BASEDEM-8900	Amber liquid	88-92	16-18	Fast water drop, most versatile intermediate for covering all treating aspects, treating high asphaltene oil.	D	S
BASEDEM-7800	Amber liquid	75-80	-	Fast water drop, dryer	D	S
BASEDEM-8200	Amber liquid	93-96	17-19	Fast water drop, cut good, need other components to finish.	S	S
BASEDEM-8300	Amber liquid	93-96	20-22	Fast water drop, cut good, need other components to finish.	S	S
BASEDEM-7727	White paste	100	17-19	Interface, slow water drop, usually cut high, generally used as blending for detail, broad demulsifier base used for wetting properties, good water quality.	S	D
BASEDEM-7721	White paste	100	19-21	Interface, slow water drop, usually cut high, generally used as blending for detail, broad demulsifier base used for wetting properties, good water quality.	S	D
BASEDEM-7717	White paste	100	19-21	Interface, slow water drop, usually cut high, generally used as blending for detail, broad demulsifier base used for wetting properties, good water quality.	S	D
BASEDEM-7711	White paste	100	20-22	Interface, slow water drop, usually cut high, generally used as blending for detail, broad demulsifier base used for wetting properties, good water quality.	S	D
BASEDEM-7788	Cream paste	97-99	15-17	Fair to good water drop, good polishers, effective at very low concentrations in blends	S	D
BASEDEM-1900	Dark amber liquid	74-76	14-16	Fair to good water drop, effective at very low concentrations in blends	S	S
BASEDEM-2000	Cream paste	88-92	20-22	Fair to good water drop, effective at very low concentrations in blends	S	S
BASEDEM-4001	Dark amber liquid	100	-	Secondary demulsifier, wetting agent, broaden treating range, interface, not prone to overtreat.	S	S
BASEDEM-4002	Dark amber liquid	58-62	-	Secondary demulsifier, slug treatment agent	I	S
BASEDEM-4003	Yellow liquid	20-30	-	Secondary demulsifier, desalting agent.	S	S
BASEDEM-4004	White paste	38-43	-	Secondary demulsifier, wetting agent, desalting agent, not prone to overtreat.	S	S
BASEDEM-4005	Amber liquid	100	-	Secondary demulsifier, wetting agent, not prone to overtreat.	S	S
BASEDEM-4006	Clear colorless liquid	100	-	Secondary demulsifier, wetting agent, interface, not prone to overtreat.	S	S
BASEDEM-4007	Clear colorless liquid	100	-	Secondary demulsifier, wetting agent, interface, not prone to overtreat.	S	D
BASEDEM-4008	Amber paste	45-55	-	Secondary demulsifier, wetting agent, interface, not prone to overtreat.	D	S
BASEDEM-4008.8	Clear colorless liquid	100	-	Secondary demulsifier, wetting agent, interface, not prone to overtreat.	S	S

(a) The relative solubility number (RSN) was determined by titrating water in a solution containing 1g of BASEDEM demulsifier and 30 ml mixture of toluene (2.6 vol%) and ethylene glycol dimethyl ether (97.4 vol%). RSN is reported as the volume of water needed to make a solution turbid or cloudy.

(b) Of 10% product in solvent
NO= not determined,
NA= not applicable,
S = soluble/clear,
D = dispersible/turbid,
I = insoluble/phase separation,
P = Paste/Gel



CORROSION INHIBITION

BASECOR corrosion inhibitors include a broad range of essential components that can be used to tackle both sweet and sour Oil & Gas and industrial water treatment corrosion. Our range of products can provide corrosion inhibition in a variety of forms, including oil soluble, water dispersible, and water soluble. Various methods of corrosion control are employed in the field, but film forming corrosion inhibitors are one of the most used and our products and recipes are developed and tested to meet specific requirements.

General information					Solubility (b,c)		
Code	% Total active	Appearance	Amine value (a)	Key attributes	Isopropanol	Water	Aromatic 150
BASECOR-1701	>98	Amber light brown past	250-300	Used in formulation of both oil and water-soluble corrosion inhibitors. Used in formulations of emulsifiers and oil wetting agents for drilling applications.	S	D	S
BASECOR-1702	>98	Amber light brown past	240-290	Used in formulation of both oil and water-soluble corrosion inhibitors. Used in formulations of emulsifiers and oil wetting agents for drilling applications.	S	D	S
BASECOR-1801	>98	Dark brown liquid	200-250	Used for the development of both water and oil soluble corrosion inhibitors.	S	D	S
BASECOR-1802	>98	Dark brown liquid	170-220	Used for the development of both water and oil soluble corrosion inhibitors.	S	D	S
BASECOR-1803	>98	Dark brown liquid	90-130	Used primarily in the formation of oil soluble corrosion inhibitors.	S	P	S
BASECOR-1804	>98	Dark brown liquid	90-140	Used primarily in the formation of oil soluble corrosion inhibitors.	S	P	S
BASECOR-1805	>98	Dark brown liquid	250-300	Used in formulations of both water and oil soluble corrosion inhibitors.	S	D	S
BASECOR-1806	>98	Dark brown liquid	250-300	Used in formulations of both water and oil soluble corrosion inhibitors.	S	D	S
BASECOR-1201	78-82	Transparent yellowish liquid	<1	Used in formulations of water- soluble corrosion inhibitors, water clarifiers and detergents.	S	S	S
BASECOR-1202	78-82	Dark brown liquid	<1	Used in water systems. The product applications include oil well drilling, completion, production, and water flood systems.	S	D	D

(a) mgKOH/g sample

(b) Of 10% product in solvent

(c) some high melt solids required warming/shaking and cooling for observation

NO= not determined, NA= not applicable, S = soluble/clear, D = dispersible/turbid, I = insoluble/phase separation, P = Paste/Gel

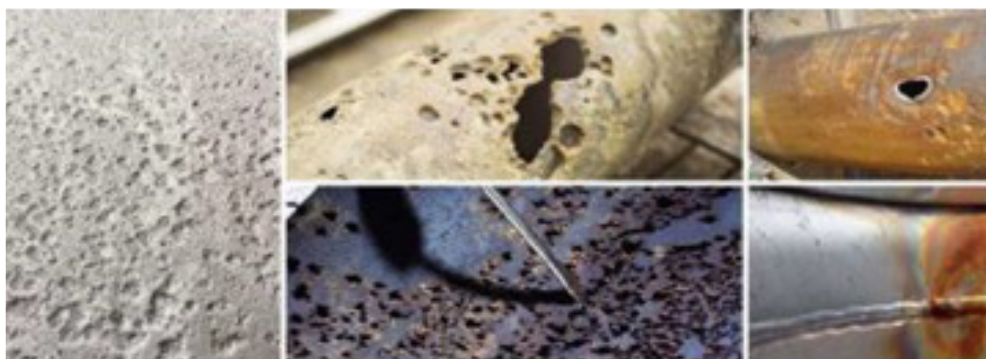
General information					Solubility (b,c)		
Code	% Total active	Appearance	pH (a)	Key attributes	Isopropanol	Water	Aromatic 150
BASECOR-2020	70-75	Clear Amber Liquid	5.5-6.5	This water-soluble corrosion inhibitor concentrate is designed for water injection systems, wash waters used in desalter plants, and wet production systems. The product is a highly efficient, film-forming corrosion inhibitor that prevents corrosive substances such as H ₂ S, CO ₂ , and chloride from reaching the metal, thereby protecting pipelines from corrosion. The product is formulated to be easily diluted with water and/or alcohols.	S	S	D
BASECOR-2030	65-70	Clear Amber Liquid	5.5-6.5	This water-soluble corrosion inhibitor concentrate is designed for oil and petroleum product lines and facilities. The product is a highly efficient, film-forming corrosion inhibitor that prevents corrosive substances such as H ₂ S, CO ₂ , and chloride from reaching the metal, thereby protecting pipelines from corrosion. The product is formulated to be easily diluted with water and/or alcohols.	S	S	D
BASECOR-2130	70-75	Clear Amber Liquid	10.5-11.5	This oil-soluble corrosion inhibitor concentrate is designed for oil and other petroleum product lines and facilities, particularly those with very low water content. The product is a highly efficient, film-forming corrosion inhibitor that prevents corrosive substances such as H ₂ S, CO ₂ , and chloride from reaching the metal, thereby protecting pipelines from corrosion. The product is formulated to be easily diluted with organic solvents and/or alcohols.	D	I	S
BASECOR-2131	85-90	Clear Amber Liquid	6-7	An oil-soluble and water-dispersible corrosion inhibitor concentrate designed for harsh conditions, such as high temperature, high pressure, and environments with hydrogen sulfide (e.g., direct injection into wells). The product is properly formulated and only needs to be diluted with organic solvents and/or alcohols.	S	D	S
BASECOR-9500	30-50	Clear Yellowish Liquid	-	Corrosion inhibitor for open cooling systems. This product is ready to use with no need for further formulation or dilution.	S	S	I
BASECOR-9600	30-50	Yellowish Hazy Liquid	-	Corrosion inhibitor for closed cooling systems. This product is ready to use with no need for further formulation or dilution.	S	S	I

(a) 5% in 3:1 IPA/H₂O

(b) Of 10% product in solvent

(c) some high melt solids required warming/shaking and cooling for observation

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SCALE CONTROL

BASECHEM have developed a wide range of specialized scale inhibitor intermediates that allow for the treatment/prevention of all common scales in a range of production conditions. The performance of scale inhibitors is highly dependent upon the conditions of application. It is suggested that scale inhibitor screening be performed under field conditions with our experts.

General information					Typical properties	
Code	Physical form	Typical pH	% Typical solids	Calcium carbonate performance	Barium sulfate performance	Other scales and function
BASEPERS-4300	Aqueous solution	<2*	48-52	Excellent	Low	Scale inhibitor for oil and gas units, at high concentration is a good corrosion inhibitor.
BASEPERS-4900	Aqueous solution	<2*	48-52	Good	Excellent	Scale inhibitor for oil and gas units, goof inhibitor for carbonate, sulfate, and phosphate. Good corrosion inhibitor.
BASEPERS-4301	Aqueous solution	10-11*	38-42	Excellent	Low	Scale inhibitor for oil and gas units, at high concentration is a good corrosion inhibitor.
BASEPERS-4901	Aqueous solution	<5	45-49	Good	Excellent	Scale inhibitor for oil and gas units, it can be used as stabilizer for peroxide bleaching, detergent auxiliaries, in industrial & municipal cleaning water, terrestrial heat water, oilfield water, etc.
BASEPERS-4902	Aqueous solution	6-8*	30.5-33	Good	Excellent	Scale inhibitor for oil and gas units, it can be used as stabilizer for peroxide bleaching, detergent auxiliaries, in industrial & municipal cleaning water, terrestrial heat water, oilfield water, etc.
BASEPERS-4500	Aqueous solution	<3	48-52	Good	Medium	Scale inhibitor for oil and gas units, can mix well with polycarboxylic acid, organophosphates, phosphate, and zinc salt.
BASEPERS-5700	Aqueous solution	<2*	48-52	Excellent	Good	Scale inhibitor for oil and gas units, perfect ability to sequester iron compounds. Exhibits thermal stability up to 210° F. It is most effectively used on a continuous basis for control of scale in production wells, disposal wells and surface equipment.
BASEPERS-6000	Aqueous solution	<3*	30-33	Good	Medium	It is used as scale inhibitor and dispersant for circulating cool water system, oil and gas units, papermaking, weave, dyeing, ceramic, painting, etc.
BASEPERS-6001	Aqueous solution	3-4*	39-41	Good	Medium	Scale inhibitor and dispersant for circulating cool water system, papermaking, weave, dyeing, ceramic, painting, etc.
BASEPERS-3300	Aqueous solution	3-4.5*	42.5-43.5	Good	Medium	Scale inhibitor and dispersant in open circulating cool water system, oilfield refill water system, metallurgy system and iron & steel plants to prevent sediment of ferric oxide.
BASEPERS-3700	Aqueous solution	3-4.5*	43-44	Good	Medium	It can be used in situations of high temperature, high pH, high hardness, and high alkali. High calcium tolerance, good inhibition effect on calcium carbonate, calcium phosphate, zinc scale and ferric oxide. It can be used with polyphosphate, zinc salt, and organophosphate.

pH for 1% solution in water.



H2S SCAVENGERS

Production and processing of oil and gas resources in sour gas formations can lead to the generation of hydrogen sulfide gas (H2S), at surface both occurring naturally through the reduction of calcium sulfate in the reservoir and through bacterial contamination via stimulation or water injection.

Uncontrolled H2S can create many operational challenges related to safety, corrosion, separation, regulatory issues and odor. The application of effective H2S scavenger chemistries we produce can eliminate these challenges allowing for optimal performance of your systems whilst dramatically improving safety and damage to the environment.

General information				Solubility (a)	
Code	% Total active	Appearance	Key attributes	Water	Aromatic 150
BASESCAV-1001	95-100	Dark amber liquid	Fast reaction with H2S and HS ion, low toxicity, and biodegradable.	S	I
BASESCAV-1002	75-80	Brownish clear liquid	Fast reaction with H2S and HS ion, low toxicity, and biodegradable.	S	I
BASESCAV-3001	75-85	Yellowish clear liquid	H2S scavenger and corrosion inhibitor for acidizing and severe conditions	S	D
BASESCAV-2001	38-42	Colorless to pale yellow liquid	Low solids formation. Mercaptan/ H2S scavenger.	S	D
BASESCAV-2002	30-40	Colorless to pale yellow liquid	Competitive low-cost scavenger	S	I
BASESCAV-2003	96-100	Colorless to pale yellow liquid	With the highest total H2S scavenging, nitrogen free, great choice for where an extended contact time is possible.	S	I
BASESCAV-2004	96-100	Colorless to pale yellow liquid	Very fast reaction with H2S and HS- ion, low toxicity, and biodegradable, without polymeric H2S byproduct.	S	S

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BIOCIDES

We offer a dedicated range of non-oxidizing surface-active organic biocide intermediates. Our Biocides act by the adsorption onto the cell membranes where they disrupt the typical function of the cell, this kill mechanism is less corrosive than with oxidizing biocides and they can in fact act as corrosion inhibitors. Many of the biocide chemistries mentioned become inactive once they reach the surface environment and are readily biodegraded to non-biocidal metabolic products.

General information				Solubility (a)	
Code	% Total active	Appearance	Key attributes	Water	Aromatic 150
BASECIDE-2900	78-82	Clear colorless to yellowish liquid	Biocide, corrosion inhibltor, and emulsifying agent. EU BPR supported.	S	S
BASECIDE-2901	48-52	Clear colorless to yellowish liquid	Biocide, corrosion inhibltor, and emulsifying agent. EU BPR supported.	S	D
BASECIDE-2400	73-76	Clear colorless to yellowish liquid	Environmental pesticide with high efficacy and low toxicity.	S	I

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ACIDIZING CORROSION INHIBITORS

Within the realm of oil and gas extraction, acidizing serves as a method aimed at prolonging the operational lifespan of oil and gas wells. The process of acidizing involves pumping acid into the well in order to dissolve the rocks that line the contours of the well. As the environment of acidizing is harsh for metal tubes and equipment having a good corrosion inhibitor is crucial.

General information					Solubility (a)		
Code	Product	% Total active	Appearance	Key attributes	Isopropanol	Water	Aromatic 150
BASEHIB-6001	High temperature acid corrosion inhibitor	40-60	Dark red liquid	Protect N80, CT and P105 steel alloys against hydrochloric acid corrosion at 135-210 °C for up to several hours	S	D	D
BASEHIB-6002	High temperature acid corrosion inhibitor	45-55	Dark brown liquid	Protect N80, CT and P105 steel alloys against hydrochloric acid corrosion at 50-200 °C for up to several hours	S	S	I

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DUST SUPPRESSION CHEMICALS

Dust suppression is a process used to restrict airborne dust particles. Dust suppression systems often spray a fine mist of dust suppression chemicals in different environments such as quarries, construction sites and roads.

General information				
Code	Chemistry	% Total active	Appearance	Key attributes
BASEDUS-7001	Organic polymers	30-35	Milky white liquid	A specially formulated, APEO free, Organic Polymer emulsion that provides optimum penetration and bonding when applied to fine or granular materials.
BASEDUS-7002	Inorganic salts	25-35	Colorless liquid	It attracts moisture from the air and its surroundings. Mineral base product.



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