

Oil & Gas Product Portfolio



About us

Evonik is active in over 100 countries around the world. In fiscal 2018, the enterprise with more than 32,000 employees generated sales of €13.3 billion and an operating profit (adjusted EBITDA) of €2.15 billion from continuing operations. The oil and gas business represents an established and growing market for the business segments of Evonik.

Throughout the oil and gas industries, Evonik has developed advanced chemistries that enhance production, protect assets and increase value through the hydrocarbon lifecycle.



Market Segments

- Drilling
- Cementing
- Completion
- Enhanced Oil Recovery
- Flowlines & Pipelines
- Gas Processing
- Infrastructure
- Midstream
- Production
- Stimulation



Oil & Gas

Energy discovery, extraction and processing requires an innovative mix of people, products and services, and most oilfield production, service and support companies know there are many ways to solve – or prevent – challenges in oil and gas operations.

As a best-in-class specialty chemicals company, Evonik is uniquely positioned to support participants across the industry. Our focus areas include customer-focused innovation, an open and performance-minded culture, and a balanced specialty portfolio. Within our diverse portfolio, our customers have found diverse and preventative solutions for common oilfield issues such as corrosion mitigation, flow improvement/transportation, as well as enhanced hydrocarbon recovery and processing. All of Evonik's operational segments are represented globally across the oil and gas industry, and bring a sustainable approach and "Power to Create" for our customers, employees and stakeholders.

Within the upstream, midstream and downstream energy markets, Evonik offers a growing portfolio of products, capabilities and innovations in the hydrocarbon lifecycle to:

- unlock reservoir potential
- protect and extend asset life and reliability
- increase and enhance production and throughput

Find your own solution by browsing through this overview of chemistries and products. Join the list of customers benefiting from Evonik's oil and gas industry innovations today.



A photograph of an oil field at sunset. Several pumpjacks are visible in the foreground and middle ground, silhouetted against a bright, orange and yellow sky. The sun is low on the horizon, creating a strong glow and casting long shadows. The sky is filled with scattered clouds, some of which are illuminated by the setting sun. The overall scene is industrial and atmospheric.

Oil & Gas Product Portfolio

Oil & Gas – Applications, Products and Market Segments

Application	Evonik Solutions	Chemistries	Products	Segments
Acid Gas Removal	Finished product used for removal of acid gases from natural gas streams.	Ethers, polyethylene glycol dimethyl ether	VARONIC® SEPURAN®	Production
Acid Thickener	Additives to be used in hydraulic fracturing, with HCl and gellants.	Tallow amine	VARONIC®	Stimulation
Acid Thickener	To build viscosity in acidic systems.	Ether amines	AROSURF®	Stimulation
Anti-Scalant	Chemistries which can be used in oilfield service operations to avoid scale in wellbore or near-wellbore radius.	Low molecular weight nitrogen-free and phosphorous-free polyelectrolytes	DEGAPAS®	Flowlines & Pipelines Production
Anti-Wear Tapes	Anti-wear tape in unbonded flexible pipes for mechanical protection of metal reinforcement components.	Polyether ether ketone (PEEK) Polyamide PA12	VESTAKEEP® VESTAMID® NRG	Infrastructure
Base Oil	Base oil for synthetic drilling fluid	Tetrabutene	Olefins	Drilling
Biocides/Oxidizers	Finished products for use as an oilfield biocide and oxidizing agent for produced water clean up, frac water pre-treatment and oxidizing organics, bacteria and iron sulfide. Evonik's peracetic acid has federal EPA approval, (EPA reg number 54289).	Peracetic acid	PERACLEAN®	Production Stimulation
Cement Additives	Thixotropic and anti-setting additives for cementing. Cement reinforcement additives. Encapsulated chemicals.	Fumed silica dispersions Fumed silica Precipitated silica	AERODISP® AEROSIL® SIPERNAT® ZEOFREE®	Drilling
	Superplasticizer to improve workability and compression strength of cement.	Ether methacrylates	VISIOMER®	
	A variety of foam control and wetting agents. Includes powder products for easy formulation of cementing powders.	Alcohol alkoxyates Diols	AROSURF®	
Cleaning Agents	Finished products with applicability for use as oilfield cleaning agent.	Hydrogen peroxide Peracetic acid	HYPROX® PERACLEAN®	Production
	Additives used in formulated products for oilfield cleaning agents.	Quaternary amines (benzyl quats)	VARIQUAT®	
	Surfactants that provide wetting and suspension to aid in removal of debris and residual components.	Amine ethoxylates Quaternary amines	TOMADOL® EV TOMAMINE® EV	Drilling Production Stimulation
Corrosion Inhibitors	Additives to be used in formulations of corrosion inhibitor chemistries.	Alkanolamides	TEGO® CI	Drilling Production Stimulation
		Amine alkoxyate	TEGO® CI	
		Amphoacetates	TEGO® CI	
		Imidazoline	TEGO® CI	
		Performance additives	TEGO® CI VARONIC®	
		Quaternary amines	ADOGEN®	
Corrosion protection, inhibition and synergists. Also offer a variety of surfactants that are used in association with corrosion inhibitors (stabilizers, emulsifiers) to aid formulation.	Amine ethoxylates Ether amines Quaternary amines	TOMADOL® EV TOMAMINE® EV	Production Stimulation	



Oil & Gas – Applications, Products and Market Segments

Application	Evonik Solutions	Chemistries	Products	Segments
Coupling / Hydrotropes	Coupling agents for stabilizing concentrate formulations.	Amphoterics	AROSURF®	Drilling Production Stimulation
Crude Oil Flow Improver	Reduce crude oil viscosity and pour point, improve crude oil flow, reduce wax deposit and yield stress.	Polyalkyl methacrylate (PAMA) and ethylene vinyl acetate (EVA)	VISCOPLEX® VISIOMER®	Production, transportation (pipeline, tanker, railcar), and storage
Crude Oil Paraffin / Wax Inhibition	Reduce crude oil viscosity and pour point, improve crude oil flow, reduce wax deposit and yield stress.	Polyalkyl methacrylate (PAMA) and ethylene vinyl acetate (EVA)	VISCOPLEX® VISIOMER®	Production, transportation (pipeline, tanker, railcar), and storage
Crude Oil Pour Point Depressant	Reduce crude oil viscosity and pour point, improve crude oil flow, reduce wax deposit and yield stress.	Polyalkyl methacrylate (PAMA)	VISCOPLEX® VISIOMER®	Production, transportation (pipeline, tanker, railcar), and storage
Crude Oil Wax Dispersant	Reduce crude oil viscosity and pour point, improve crude oil flow, reduce wax deposit and yield stress	Polyalkyl methacrylate (PAMA) and ethylene vinyl acetate (EVA)	VISCOPLEX® VISIOMER®	Production, transportation (pipeline, tanker, railcar), and storage
Defoamer and Defoamer Agents	Additives for water treatment, drilling and fracturing fluids.	Precipitated silica Fumed silica	AEROSIL® SIPERNAT® ZEOFREE® ZEOFOAM®	Drilling Production Stimulation
		Polyether siloxanes	AROSURF®	
	Dispersible defoamer based on organo-modified siloxanes	AROSURF®		
	Rapid wetting anionic surfactant for use in production wells.	Anionic surfactant	REWOPAL®	
	Liquid products. Offer both formulated and molecular defoamers. Molecular defoamers can provide wetting as well as defoaming.	Alcohol alkoxyates Siloxanes	AROSURF®	
	Powder products. Active defoamers on an inert carrier. Easy to handle free-flowing powders. Ideal for using in powdered cement formulations.	Alcohol alkoxyates Diols	AROSURF®	
Demulsification	Separation or “breaking” of oil-in-water emulsions.	Fumed silica Precipitated silica	AEROSIL® SIPERNAT®	Production
		Alcohol ethoxyates	TOMADOL® EV	
Downhole Liners	Protection of downhole production tubing and casing against mechanical and chemical wear under high pressure and high temperature (HPHT) harsh conditions.	Polyether ether ketone (PEEK)	VESTAKEEP®	Infrastructure



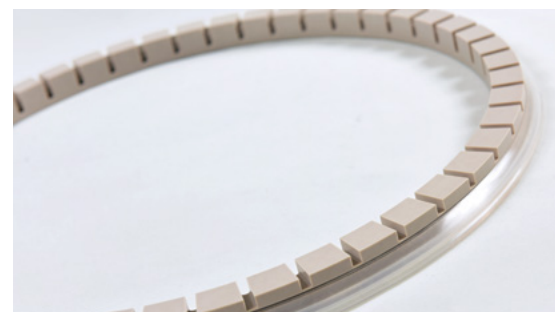
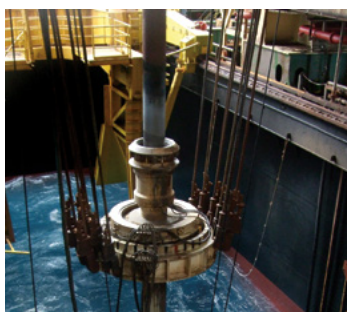
Oil & Gas – Applications, Products and Market Segments

Application	Evonik Solutions	Chemistries	Products	Segments
Drag Reducers	Building block to make high molecular weight polymer to reduce the drag in the pipeline.	Alkyl methacrylates (hydrophobic)	VISIOMER®	Production & Midstream
Emulsifiers	Additives to be used in preparation of oil-based drilling muds.	Quaternary amines	ADOGEN® TEGO® VARIQUAT®	Drilling
	Additives for preparation of Pickering emulsions for oil and water based drilling muds and chemicals.	Ester quats	TEGO®	
	Candidate additives to be used in preparation of oil-based drilling muds.	Fumed silica	AEROSIL®	
	Emulsification of oils, corrosion inhibitors and other additives.	Imidazoline	ADOGEN®	
Enhanced Oil Recovery-Chemical Flooding	Monomers to support the development of polymers for enhanced oil recovery and chemical flooding operations.	Amine ethoxylates Alcohol ethoxylates Amphoterics	TOMADOL® EV TOMAMINE® EV	Drilling Production Stimulation
		Aminofunctional (cationic) methacrylates, ether methacrylates and methacrylamides	VISIOMER®	
Flexible Pipes	Pressure barrier layer in unbonded flexible pipes for physical protection and structural component. Outer sheath pipe for corrosion and physical protection.	Polyamide PA12	VESTAMID® NRG	Infrastructure
Flexible Tubing and Hoses	Easy processing and good dimensional control during pipe extrusion, especially when manufacturing of multilayer tubes. PA12 compound is optimized for excellent bonding to a fluoropolymer layer.	Polyamide PA12	VESTAMID® NRG	Infrastructure
Flow Assurance	Surfactants that provide cleansing by removing paraffin and asphaltene waxes to allow free-flowing of the oil, often used in the rehabilitation and maintenance of older wells.	Alcohol ethoxylates	TOMADOL® EV	Stimulation Production
	Reduce crude oil viscosity and pour point, improve crude oil flow, reduce wax deposit and yield stress.	Polyalkyl methacrylate (PAMA) and ethylene vinyl acetate (EVA)	VISCOPLEX® VISIOMER®	Production, transportation (pipeline, tanker, railcar), and storage
Flowback Surfactants	Surfactants that assist oil flow-back during production by reducing capillary pressure and water blocks.	Alcohol ethoxylates Amine oxides	TOMADOL® EV TOMAMINE® EV	Stimulation
Fluid Loss Agents	Building blocks to make polymers that prevent the loss of fluid to the formation.	Alkyl methacrylates, aminofunctional methacrylates and methacrylamides	VISIOMER®	Drilling Stimulation
Foamers & Foaming Agents	Chemistries (additives and finished products) to be used downhole as a foam stabilizer/wetting agent in hard water, for drilling muds, foam enhancement in foam fracturing and oil displacement.	Amphoteric surfactants including capramidopropyl betaines and amine oxides	TEGO® FB	Drilling Production Stimulation



Oil & Gas – Applications, Products and Market Segments

Application	Evonik Solutions	Chemistries	Products	Segments
Foamer Production & Foam Stabilizers	Foamer production & foam stabilizers.	Amine oxides Amphoterics Alcohol ethoxylates	TOMADOL® EV TOMAMINE® EV	Stimulation
Fracturing Fluid Additives	Additives to modify rheological properties of supercritical gases (CO ₂) to improve sweep efficiency.	Fumed silica	AEROSIL®	Stimulation
Free Flow / Anti-Caking Agents	Additives to help prevent formation of lumps and improve flow of powders.	Fumed silica Precipitated silica	AEROSIL® SIPERNAT® ZEOFREE® ZEOLEX® ZEOTHIX®	Drilling Production Stimulation
Friction Reducer	Building blocks to make friction reducers for hydraulic fracturing in multiple brine conditions.	Aminofunctional (cationic) methacrylates and methacrylamides	VISIOMER®	Stimulation
Gas Separation	Efficient gas separation membranes for generating N ₂ , removing CO ₂ , recovering H ₂ and recovering/upgrading He.	High performance polyimide	SEPURAN®	Drilling Enhanced Oil Recovery Gas Processing
Gelling Agents	Agents to assist with gel texture, including in hydrochloric acids.	Tallow betaine	REWOTERIC® TEGO®	Stimulation
		Aminofunctional methacrylates, hydroxy methacrylates and methacrylamides	VISIOMER®	Drilling Stimulation Enhanced Oil Recovery
Guar Slurry Additives	Dispersion aid to help with hydration stabilization. These surfactants are compatible with most base oils.	Alcohol ethoxylates	TOMADOL® EV	Stimulation
H ₂ S Control	Product which can be used to control and/or remove H ₂ S, including odor removal.	Peracetic acid Hydrogen peroxide	PERACLEAN® HYPROX®	Production
Hydrate Inhibitors	Building block to make polymer to prevent methane hydrate formation.	Aminofunctional methacrylates, cationic methacrylamide, methacrylate and methacrylamides (hydrophobic)	VISIOMER®	Flowlines & Pipelines Production
Iron Sulfide Scavenger	Chemistry for downhole treatment and removal of iron sulfide.	Peracetic acid	PERACLEAN®	Production



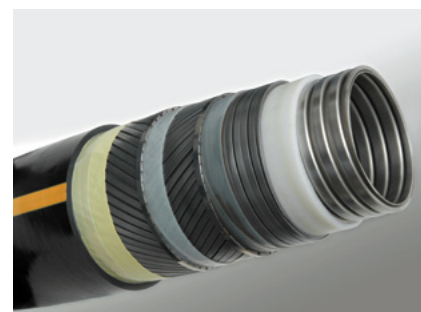
Oil & Gas – Applications, Products and Market Segments

Application	Evonik Solutions	Chemistries	Products	Segments
Liquid to Powder Conversion	To convert difficult-to-handle liquids (freezable, very viscous, hygroscopic) into powders.	Fumed silica Precipitated silica	AEROSIL® SIPERNAT® ZEOFREE® ZEOLEX®	Drilling Production Stimulation
Loss Control	Superabsorbents for loss control applications.	Superabsorbent polymer	Absorbent Polymers	Drilling Production Stimulation
Mobility & Conformance Control of CO ₂	Additives to modify rheological properties of supercritical gases (CO ₂) to improve sweep efficiency.	Fumed silica	AEROSIL®	Enhanced Oil Recovery
Nanofiltration Separation	Robust solvent-stable membranes for separating molecules dissolved in organic liquids.	High performance polyimide	DuraMem® PuraMem®	Production Midstream
Natural Gas Pipes and Fittings	Extends operating pressure of thermoplastic gas pipes up to 250 psig by replacing metal gas pipelines. Provides significant installation efficiencies and cost savings versus metal pipes and offers additional operational benefits such as corrosion resistance and worry-free performance. PA12 is approved for use in the USA per DOT PHMSA Federal Code 49 CFR 192.	Polyamide PA12	VESTAMID® NRG	Flowlines & Pipelines Infrastructure
Oil & Gas Fittings	Compression rings, back-up rings, seals, gaskets, O-rings, flow control valves, compression plates, electrical connectors in downhole, high-temperature, high-stress applications.	Polyether ether ketone (PEEK)	VESTAKEEP®	Infrastructure Production
Organophilic Clays	Surface treatment of clay minerals to make them oil-dispersible.	Amine quats Etheramines	TOMAMINE® EV	Drilling
Paraffin / Wax Inhibitors	Building blocks to make polymers to inhibit the paraffin and wax formation.	Alkyl methacrylates (hydrophobic)	VISIOMER®	Flowlines & Pipelines Production
Petrochemical Processing	"Simplify Your Process" with additives and antifoulants for monomer production and processing of light olefins.	Proprietary formulations	SiYPro®	Downstream
pH Buffering	Additive to provide an alkaline pH and to prevent the pH from fluctuating as a consequence of acid or base influxes.	Potassium carbonate	Potassium Derivatives	Drilling Completion Stimulation
Pipe Insulation	Additives for polyurethane rigid insulation foam.	Tertiary amine and metal catalysts	DABCO® POLYCAT®	Flowlines & Pipelines Infrastructure
		Silicone surfactant	TEGOSTAB®	Flowlines & Pipelines Infrastructure



Oil & Gas – Applications, Products and Market Segments

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Pipe Liners and Coatings	Pipe liners, coatings, extruded pipe, polymer composites, extrusion coatings, and powder coatings.	Polyether ether ketone (PEEK)	VESTAKEEP®	Flowlines & Pipelines Infrastructure Production
		Polyamide PA12	VESTAMID® NRG	
	Amine and metal-based catalysts for polyurethane coatings.	Tertiary amine and metal catalysts	DABCO® POLYCAT®	Flowlines & Pipelines Infrastructure
	High performance amine curatives for polyurea coatings and elastomers.	Diamine curatives	VERSALINK®	
Pipe Liners Interior	Characterized by easy processing and excellent dimensional control during pipe extrusion, especially processing of large diameter pipes. The material has an excellent compatibility with crude oil and oilfield chemicals resulting in high dimensional stability and unaffected properties of liners in contact with these chemicals even at high temperatures.	Polyether ether ketone (PEEK)	VESTAKEEP®	Flowlines & Pipelines Infrastructure
		Polyamide PA12	VESTAMID® NRG	
Proppant Coatings and Proppant Agents	Dynasylan® functional silanes are versatile additives for adhesion promotion, coupling between inorganic materials and organic polymers, polymer crosslinking and surface modification. Downhole applications include coated proppants and stone consolidation. Low VOC and water-based Dynasylan® HYDROSIL products offer easy-to-use, innovative silane systems. Dynasylan® SIVO products combine multiple functions into one product.	Amino & multifunctional silanes	Dynasylan® Dynasylan® Hydrosil Dynasylan SIVO®	Stimulation
		Fumed silica	AEROSIL®	
	Super wetters, defoamers and anti-stat surfactants that aid in coating the proppants.	Amine quats	TOMAMINE® EV	
	Amine and metal-based catalysts for polyurethane resin-coated proppants.	Tertiary amine and metal catalysts	POLYCAT® DABCO®	
Reinforced Thermoplastic Pipe (RTP)	With VESTAMID® NRG as liner material, the application window of RTP's can be extended. A unique characteristic of VESTAMID® NRG is its excellent barrier properties against benzene, toluene and xylene often known as BTX.	Polyamide PA12	VESTAMID® NRG	Flowlines & Pipelines Infrastructure
Rheology Modifiers and Viscosifiers	Additives to support the development of polymers and alter rheological properties including control of sagging, settling, stability and processability of liquids and powders.	Fumed silica Precipitated silica	AEROSIL® SIPERNAT® ZEOTHIX®	Drilling Production Stimulation
		Superabsorbent polymer	Emulsion Polymers	
		Aminofunctional methacrylates, ether methacrylates and methacrylamides	VISIOMER®	



Oil & Gas – Applications, Products and Market Segments

Application	Evonik Solutions	Chemistries	Products	Segments
Scale Inhibition	Prevent scale deposition on pipelines & flowlines, including extended release.	Low molecular weight nitrogen- and phosphorous-free polyelectrolytes	DEGAPAS®	Flowlines & Pipelines Production Stimulation
		Ether methacrylates and polyacrylates	VISIOMER®	
Scale Removers	Finished products which can be used in oilfield service operations to remove scale in wellbore or near wellbore radius.	Peracetic acid	PERACLEAN®	Production Stimulation
Shale Control	Building blocks for the production of shale control polymers.	Aminofunctional (cationic) methacrylates and methacrylamides	VISIOMER®	Drilling Stimulation
Spacer Surfactants	Excellent degreasers and solvent replacements.	Alcohol ethoxylates Formulated surfactants	AROSURF® TOMADOL® EV TOMAMINE® EV	Drilling
Stimulation Additive	Slurry additives to render particulate surfaces extremely hydrophobic.	Silicone quat	AROSURF®	Stimulation
Surfactant Flooding (EOR, Oil Sands)	Surfactants with great wetting; low CMC surfactants.	Alcohol ethoxylates	TOMADOL® EV	Production
Swelling Agent	Superabsorbents for fracking, drilling, general solidification and absorbing applications.	Superabsorbent polymer	Absorbent Polymers	Drilling Production Stimulation
	Swelling agent for swellable packers.	Superabsorbent polymer	CREABLOC® SIS E4080F	
Thermoplastic Composite Pipes (TCP) & Risers (TCR)	VESTAMID® NRG has a strong track record in subsea (offshore) Oil & Gas applications and is available for multiple functions in TCP and TCR designs including liner material suitable for multi phase operations, matrix material of the reinforcement layer, and jacket material protecting the reinforcement layer against the environment.	Polyamide PA12	VESTAMID® NRG	Flowlines & Pipelines Infrastructure
Water Treatment	Building block to make cationic water soluble polymer to treat production waste water.	Cationic methacrylamide	VISIOMER®	Production Stimulation
		Cationic methacrylate	VISIOMER®	
Wetting Agents	Additives to help reduce the surface tension of a liquid, causing the liquid to spread across or penetrate more easily the surface of a solid.	Ammonium chloride products	ADOGEN® VARIQUAT®	Drilling Stimulation
		Organo-modified siloxanes	AROSURF®	
	Surfactants that provide wetting, foam control and are non-emulsifying.	Alcohol ethoxylates Ester quats Amphoterics Amine oxides	AROSURF®	Drilling Cementing Completion Stimulation



EVONIK PRODUCT WEBSITES

AERODISP®
www.aerodisp.com

AEROSIL®
www.aerosil.com

Dynasylan®
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Dynasylan SIVO®
www.dynasylan.com

DuraMem®
PuraMem®
duramem.evonik.com

HYPROX®
PERACLEAN®
active-oxygens.com/product/h2o2/en/application-areas/oil-gas/pages/default.aspx

Potassium Derivatives
www.potassium-derivatives.com

ADOGEN®
AROSURF®
TEGO® CI
TEGO® FB
TOMADOL® EV
TOMAMINE® EV
VARIQUAT®
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POLYCAT®
specialty-additives.evonik.com

TEGOSTAB®
pu-additives.com

Superabsorbents
CREABLOC® SIS E4080F
www.creasorb.com

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