

DuPont Water Solutions for Oil & Gas



Water quality is critical to improve the recovery and minimize the environmental impact of hydrocarbon production. Solids removal and salinity adjustments from the industrial water produced during this process are a major concern for oil and gas producers looking to protect their wells, lower costs, protect downstream equipment, and reduce safety and environmental issues. DuPont Water Solutions offers expertise and a growing portfolio of technologies to address the unique industrial water resource management needs of the hydrocarbon exploration and production industry.

Water technologies for onshore and offshore systems

The prevention of sulfate precipitation and souring in an injection well or reservoir is a major concern for oil and gas producers looking to effectively extract oil from wells, reduce costs, protect downstream equipment, and mitigate safety and environmental risks. Since injection water quality is critical to improve oil recovery, DuPont Water Solutions provides various solutions that can be used in various steps of injection water treatment systems for safe and reliable operation.

Products Offered for Injection Water		
Pretreatment for Particle Removal	 DuPont™ IntegraFlo™ Ultrafiltration Integrated Ultrafiltration (iUF) 	• MEMCOR® P20N
Offshore Sulfate Removal	• FilmTec™ SR90-400i • FilmTec™ SR90-440i	• FilmTec™ SR90HR-440i • FilmTec™ Fortilife™ SR90i
Desalination	• Reverse osmosis & nanofiltration elements	
Degasification	 DuPont™ Ligasep™ LDM-040-LS DuPont™ Ligasep™ LDM-120-LS 	• DuPont™ Ligasep™ LDM-040-HS • DuPont™ Ligasep™ LDM-120-HS

Addressing pressing needs for produced water treatment

Produced water is the water byproduct that comes out of the well with the crude oil. The composition of produced water varies widely from well to well, but typically contains soluble and non-soluble oil/organics, suspended solids, dissolved solids, and toxic heavy metals and must be treated before discharge or reinjection. DuPont offers a variety of solutions to effectively treat produced water for reuse or discharge.

Products Offered for Produced Water Treatment		
Organics / Oil Removal	 DuPont™ AmberLite™ ROC110 Oil-Coalescing Media DuPont™ AmberSorb™ L493 Polymeric Adsorbent DuPont™ AmberLite™ XAD™ 4 Polymeric Adsorbent DuPont™ AmberLite™ XAD™ 16 Polymeric Adsorbent 	 DuPont™ AmberLite™ SCAV1 Ion Exchange Resin DuPont™ AmberLite™ SCAV2 Ion Exchange Resin
Biodegradable Organics & Nutrients Removal	• MEMCOR® B40	
Salinity Management	 FilmTec™ SW30HRLE Elements FilmTec™ SW30XHR Elements 	 FilmTec™ Fortilife™ XC Elements FilmTec™ XUS180808
Hardness Removal	 DuPont™ AmberLite™ IRC83 H DuPont™ AmberLite™ HPR8300 H DuPont™ AmberLite™ HPR1100 Na DuPont™ AmberSep™ Chelating Resins 	 FilmTec™ Fortilife™ XC-N FilmTec™ NF270 Elements FilmTec™ NF90 Elements
Heavy Metal Removal	 DuPont™ AmberSep™ IRC748 UPS Chelating Resin DuPont™ AmberSep™ 43600 Chelating Resin DuPont™ AmberSep™ GT74 Ion Exchange Resin DuPont™ AmberSep™ 21K XLT Ion Exchange Resin DuPont™ AmberSep™ G26 H Ion Exchange Resin DuPont™ AmberLite™ IRC83 H Resin 	 DuPont™ AmberLite™ HPR1100 Na Resin DuPont™ AmberLite™ HPR9200 Cl DuPont™ AmberLyst™ A21 DuPont™ Ultrafiltration SFP Modules

Unconventional & sustainable production of hydrocarbons

Unconventional oil and gas extraction refers to extraction methods other than traditional vertical oil well pumping. Unconventional extraction processes require the use of new, often complex, methods such as developing oil sands (also known as tar sands or bituminous sands), hydraulic fracturing and directional drilling. As these processes become more popular, the exploration of these oil resources also raises environmental concerns such as groundwater contamination and overuse of scarce surface water. DuPont offers innovative water treatment technologies to minimize the environmental impact of unconventional oil and gas extraction methods.

Shale Oil	 DuPont™ AmberSorb™ L493 DuPont™ AmberLite™ IRC83 H DuPont™ AmberLite™ HPR8300 H FlimTec™ Fortilife™ XC-N 	 FilmTec™ SW30XFR-400/34 FlimTec™ Fortilife™ XC70 FilmTec™ SW30XHR FilmTec™ XUS180808
Coal Seam Gas	 DuPont™ IntegraFlux™ SFP-2880 DuPont™ IntegraFlux™ SFP-2880XP DuPont™ AmberLite™ IRC83 H FilmTec™ SW30XFR-400/34 	 FilmTec™ BW30XFRLE-400/34 FilmTec™ ECO PRO-400 FilmTec™ Fortilife™ series FilmTec™ XUS180808
Steam-Assisted Gravity Drainage (SAGD)	 DuPont™ AmberLite™ IRC83 H DuPont™ AmberLite™ IRC120 Na DuPont™ AmberLite™ HPR1100 Na 	• FilmTec™ Eco Pro™ • FilmTec™ Fortilife™ series elements



Learn more about DuPont's product offering in the Oil & Gas industry:

Injection Water **Treatment brochure**



Water Treatment for Unconventional Oil & Gas Extraction Processes brochure



Produced Water Treatment brochure



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