

A large industrial drilling rig stands against a dramatic sunset sky with orange and purple clouds. The rig is a complex structure of metal beams, ladders, and platforms, with several yellow lights illuminated. In the background, a long, low industrial building is visible. The overall scene is industrial and atmospheric.

# Lubrizol H<sub>2</sub>S Scavengers

Solutions for oilfield applications to maximize throughput and operational efficiencies

*Lubrizol*

Production and processing of oil and gas resources can lead to generation of hydrogen sulfide gas (H<sub>2</sub>S), both occurring naturally through the reduction of calcium sulfate in the reservoir and through bacterial contamination via stimulation or water injection.

Uncontrolled H<sub>2</sub>S can create several operational challenges related safety, corrosion, separation, regulatory and odor. The application of effective H<sub>2</sub>S scavenger chemistries can eliminate these challenges allowing for optimal performance of your system and a reduction in HSE exposure.

Lubrizol offers a complete family of H<sub>2</sub>S scavengers that will enable you to tailor your treatment to achieve maximum efficiency from your applications.

### Performance Highlights

Lubrizol's water soluble H<sub>2</sub>S scavenger products were tested via industry standard test methods. In the included method a gas mixture of H<sub>2</sub>S, CO<sub>2</sub> and Nitrogen was bubbled through synthetic brine with the effluent gas continually monitored for H<sub>2</sub>S. H<sub>2</sub>S Scavengers were injected into the brine and the impact to the resulting H<sub>2</sub>S was measured. The results reveal scavenging capacity and kinetics under the test conditions. Lubrizol's SULFA-CLEAR™ 8846 showed an improved total H<sub>2</sub>S consumption, capacity and comparable kinetics to MEA Triazine. SULFA-CLEAR™ 8846 is an excellent alternative for MEA Triazine applications. Lubrizol® 6115P presented with the highest total H<sub>2</sub>S and is an excellent nitrogen free choice for applications where an extended contact time is possible.

### Products

Product	Chemistry	Solubility	Activity	Typical pH	Description
SULFA-CLEAR™ 8250	MMA Triazine	Water	30%	11.20	Higher thermal stability, lower solids triazine
SULFA-CLEAR™ 8411HC	MEA Triazine	Water	80%	10.25	Concentrated triazine
SULFA-CLEAR™ 8411C	MEA Triazine	Water	60%	9.75	Competitive low cost triazine
SULFA-CLEAR™ 8640	MEA Triazine Polyamine Adduct	Water	50%	11.00	Low solids formation. Mercaptan/H <sub>2</sub> Sscavenger
SULFA-CLEAR™ 8846	Oxazolidine Derivative	Water / Oil	>99%	10.00	High activity, fast acting non-triazine scavenger with unique oil/water solubility
SULFA-CLEAR™ 8847	Alkyl Amine Adduct	Oil	>99%	10.50	Oil soluble H <sub>2</sub> S scavenger
Lubrizol® 6115P	EDDM(ethylenedioxydimethanol)	Water	~95%	6.75	Concentrated nitrogen free scavenger

## Application Guide

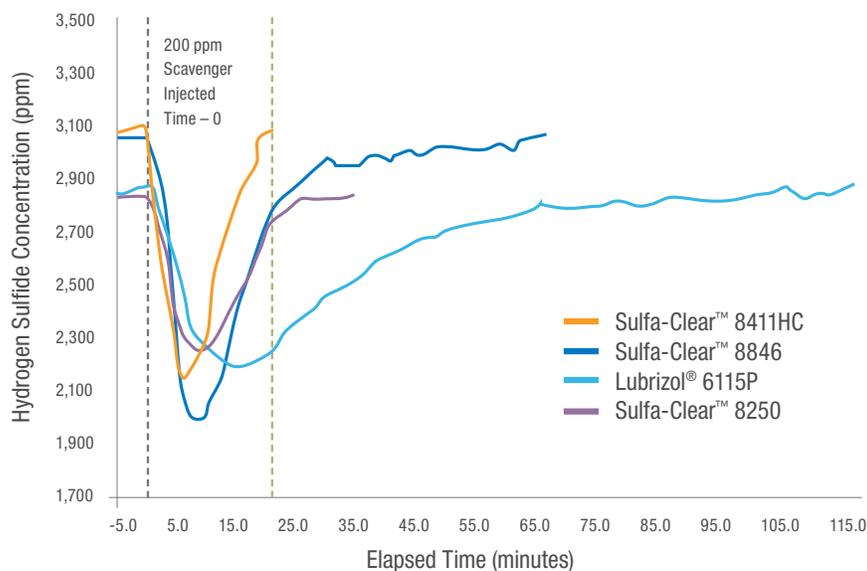
Product	Downhole	Wellhead	Process (Liquid)	Process (Gas)	Pipeline	Storage Tank	Bubble Tower
SULFA-CLEAR™ 8250	●	●	●	●	●	●	●
SULFA-CLEAR™ 8411HC	●	●	●	●	●	●	●
SULFA-CLEAR™ 8411C	●	●	●	●	●	●	●
SULFA-CLEAR™ 8640	●	●	●	●	●	●	●
SULFA-CLEAR™ 8846	●	●	●	●	●	●	●
SULFA-CLEAR™ 8847	●	●	●	●	●	●	●
Lubrizol® 6115P	●	●	●	●	●	●	●

● Excellent ● Good ● Fair ● Poor

More details can be obtained from individual product data sheets or your Lubrizol representative.

Product	Activity %	Max H <sub>2</sub> S Reduction (ppm)	Total H <sub>2</sub> S Consumption (ppm*cc)	Capacity @ 20min* (mg H <sub>2</sub> S/mL Scavenger)
SULFA-CLEAR™ 8411HC	80%	940	705,600	31
SULFA-CLEAR™ 8250	30%	582	561,395	25
SULFA-CLEAR™ 8846	100%	1,056	1,259,175	39
Lubrizol® 6115P	100%	675	1,820,288	16

\* Calculated to account for active content



## Product Features and Benefits

- > **Highly Active Products** – tailor activity of finished products to meet application needs
- > **Innovative Chemistries** – best in class performance for a wide range of applications and operating conditions
- > **Cost-Efficient Treatment** – control application costs and maximize profitability
- > **Global Manufacturing** – minimize lead times and optimizes your supply chains

### Test Conditions

Liquid Phase	Synthetic Brine
Scavenger Dosage	200ppm
Gas Composition	~3,200ppm H <sub>2</sub> S
Gas Flow Rate	75 cc/minute
Temperature	25°C

## Summary

Lubrizol is focused on the development and delivery of chemical solutions for a range of industries to help the world move cleaner, create smarter, and live better. Our comprehensive H<sub>2</sub>S scavenger range is offered to help you achieve your targeted results. For more detail and support, contact a Lubrizol representative.

A close-up, over-the-shoulder view of a worker wearing a white hard hat with a blue logo and a blue work shirt. The worker is operating industrial machinery, with their hands on a large, rusted metal wheel. The background is a dramatic sunset sky with orange and yellow hues. The image is overlaid with a faint, light-colored hexagonal grid pattern.

**Move forward with confidence.**

Every time a challenge is solved the world moves forward. And wherever mobility or industrial challenges are being solved you'll find Lubrizol. Our deep chemistry and application expertise, leading testing capabilities, early innovation pipeline, market-driven insights, and commitment to continuous improvement and sustainability are all formulated to help you succeed today and tomorrow.

**The Lubrizol Corporation**  
[www.lubrizol.com](http://www.lubrizol.com)

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