

SV-120™ *SV-120 hydrogen sulfide scavenger is a specifically formulated liquid designed to remove hydrogen sulfide from low-viscosity fluids. It is an organic metal complex which is soluble in virtually all types of water to reduce or remove hydrogen sulfide concentrations to a safe level. SV-120 is a winterized formulation with a low pour point making it applicable in cold climates and has a high flash point.*

TYPICAL PHYSICAL PROPERTIES

Physical appearance	Dark brown liquid
Specific gravity	1.37
pH (1% solution)	3.8
Solubility	Soluble in brine and freshwater
Flash point	>200°F (93.3°C) (PMCC)
Pour point	-30°F (-34.4°C)

APPLICATIONS

SV-120 is intended to be used in unviscosified clear fluids ranging from freshwater to saturated brine systems. It differs from other hydrogen sulfide (H₂S) scavengers in that SV-120 is soluble in aqueous environments and does not have to be suspended to be effective. SV-120 is ideal for removing hydrogen sulfide from makeup water and for clear-brine completion fluids. In salt or low-solids muds and makeup water, SV-120 is effective within a pH range of 6 to 11 and is compatible with scale inhibitors and oxygen scavengers. In the presence of hydrogen sulfide, SV-120 reacts to form insoluble zinc sulfide, effectively removing H₂S from a system. A 1 lb/bbl (2.85 kg/m³) treatment of SV-120 removes approximately 220 mg/l sulfides.

If hydrogen sulfide is anticipated, it is recommended to pretreat the system with 1 to 2 lb/bbl (2.85 to 5.7 kg/m³) of SV-120. It can be added directly to the mud pits at

the pump suction or wherever good mixing is available in the surface system. It is important to distribute the treatment throughout the circulating system to obtain a uniform concentration. It is advantageous to use a proportioning pump for adding SV-120 so that more evenly distributed treatments can be obtained, as determined by measured sulfide concentrations. Daily monitoring of sulfides using the Hach test and the Garrett Gas Train is required to determine necessary treatments and monitor performance. Since the product is soluble, it is not removed by mechanical solids-control equipment or sedimentation. SV-120 treatments may thin viscosified fluids. While the thinning effect is usually negligible, pilot testing is recommended for viscosified systems. SV-120 treatments into CaCl₂ brines may cause foaming. Conventional defoamers are effective at controlling any foaming.



ADVANTAGES

- Removes H₂S by forming an insoluble sulfide precipitate.
- Effective in low-viscosity fluids; does not require viscosity for suspension.
- Effective in a wide range of fluids from fresh to saturated brines.
- Compatible with common scale inhibitors and oxygen scavengers.
- Aids in the removal of small amounts of dissolved oxygen.

TOXICITY AND HANDLING

Bioassay information is available upon request.

Handle as an industrial chemical, wearing protective equipment

and observing the precautions as described on the Transportation and Material Safety Data Sheet (MSDS).

PACKAGING AND STORAGE

SV-120 is packaged in 5-gal (18.9-l) cans or 30-gal (113.5-l) drums.

Keep containers closed and firmly sealed. Store in a well-ventilated area, away from sources of ignition such as heat, sparks and open flames.

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P.O. Box 721110
Houston, Texas 77272-1110
Tel: 281-561-1300
Fax: 281-561-7240
<http://www.midf.com>
E-mail: mimud@midfre.com