

Baker Petrolite

SULFA SCRUB® HSW2001

Hydrogen Sulfide Scavenger

DESCRIPTION:

Baker Petrolite SULFA SCRUB® HSW2001 is a proprietary triazine/aldehyde formulation that is specifically designed to remove hydrogen sulfide from oil and gas produced fluids. This liquid product will react liberally with H₂S to form a stable, water soluble reaction product that may be easily removed from the system. A unique dispersant additive has been added to minimize the possibility of developing solids in tower and flow-line applications. SULFA SCRUB HSW2001 will perform most effectively when water content of the gas is above 0.15 kg/10³m³ (7 pounds / MMSCF).

APPLICATION:

Since removal of toxic H₂S is by a true, non-reversible chemical reaction, proper-mixing and contact time favor efficient and economical treatment. The product is continuously added to the system by a positive displacement pump. Often, treating efficiency can be significantly aided by the selected use of spray nozzles, quills, static mixers or pump pulsation dampers.

Gas Systems

The point of injection should be as early as conveniently possible in the producing system to maximize contact time. Injection downhole or before wellhead chokes are generally the best points of application. A minimum of 0.5 to 1.0 m³ of produced liquids per 100 10³ m³/Day of gas at the point of injection is required to maintain fluid byproducts. In flowlines where contact time is limited or liquids quickly stratify along the line, atomization and/or static mixers may be required. With the use of atomizers or static mixers, a few seconds contact is usually sufficient.

The recommended treatment level with SULFA SCRUB HSW2001 is 0.008 liters X ppm's H₂S X (10³m³/Day of gas). A slightly higher level of scavenger may be required where lower levels of

H₂S, short exposure times, and/or a large amount of liquids are present.

NOTE: Treating beyond the recommended rate will create conditions where solids are formed. Solids can be solubilized by soaking in Monoethanol-Amine.

TYPICAL PROPERTIES:

Appearance	Light straw colored liquid
Density @ 15°C	1.06 kg/Liter
Flash Point, TCC	41°C
Freeze Point	<-40°C

FEATURES AND BENEFITS:

Feature:

- Forms water soluble reaction products

Benefit:

- No solids to clog systems

Feature:

- Reaction products thermally stable

Benefit:

- H₂S permanently removed

Feature:

- Can be used in flow-line or towers

Benefit:

- Minimize cost

Feature:

- Excellent cold handling properties

Benefit:

- Can be stored outdoors

MATERIAL COMPATIBILITY:

This product can be stored in mild steel, stainless steel, reinforced fiberglass or cross-linked polyethylene type vessels. Stainless steel pump internals with Teflon seals are recommended.

Disclaimer of Liability: Baker Petrolite Corporation (BPC) warrants to purchaser, but no third parties or others, the specifications for the product shall fall within a generally recognized range for typical physical properties established by BPC when the product departs BPC's point of origin and that any services shall only be performed in accordance with applicable written work documents. **BPC MAKES NO OTHER WARRANTY OR GUARANTEE OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, REGARDING ANY SERVICES PERFORMED OR PRODUCT SUPPLIED.** BPC will give purchaser the benefit of BPC's best judgement in making interpretations of data, but does not guarantee the accuracy or correctness of such interpretations. BPC's recommendations contained herein are advisory only and without representations as to the results. BPC shall not be liable for any indirect, special, punitive, exemplary or consequential damages or losses from any cause whatsoever including but not limited to its negligence.

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(SULFA SCRUB HSW2001, continued)

SAFETY AND HANDLING:

SULFA SCRUB HSW2001 hydrogen sulfide scavenger is available in 208 liter drums and bulk quantities from any Baker Petrolite distribution center.

DISPOSAL of SPENT MATERIAL

The Aqueous Spent SULFA SCRUB HSW2001 solution are not expected to show any hazardous property according to the criteria identified in the Environmental Protection and Enhancement Act, waste control regulation. As such these materials are not considered Hazardous Waste and can be disposed of by subsurface injection into a Class 1A or 1B injection well. The current MSDS for Sulfa Scrub HSW2001 is valid for transporting Spent Material, however, the Product Name on the Bill of Lading should be specified as "Spent Sulfa Scrub HSW2001."

Read the Material Safety Data Sheets (MSDS). Observe warning label on product container. Keep container closed when not in use. Always wear eye and skin protective equipment. Avoid breathing of vapors and contact with skin or eyes. In case of skin contact, wash areas with soap and water. In case of eye contact, flush eyes with water and get medical attention. Contain spills to prevent chemical from entering a waterway and for more information, please refer to the Material Safety Data Sheet.

Baker Petrolite 24 Hour Emergency Hotline:

1-800-424-9300 (CHEMTREC) U.S.A.

1-613-996-6666 (CANUTEC) Canada

Baker Petrolite Customer Care Hotline:

1-800-872-1916 (8 a.m. to 5 p.m. CST)