



PRODUCTION ENHANCEMENT SYSTEMS, LLC

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BEADLEJUICE 9001 H2S SCAVENGER

DESCRIPTION BEADLEJUICE 9001 is a hydrogen sulfide scavenger concentrate for drilling, flowline, and bubble tower applications, which will react rapidly with hydrogen sulfide. The reaction occurs in the water phase to form stable, water-soluble reaction products which can be injected into disposal wells. BEADLEJUICE 9001 is unaffected by carbon dioxide, continuing to scavenge H₂S efficiently. A typical recommendation for a field blend for gas treating would consist of diluting the product 25% - 50% with fresh water.

PHYSICAL PROPERTIES	Density (Lbs. / Gal)	9.425
	Specific Gravity @ 60° F	1.130
	Flash Point (TCC)	>200°F.
	Pour Point	-40°F.
	pH	10.0 – 11.0
	Solubility	
	Fresh Water	Soluble
	Isopropanol	Soluble
	Methanol	Soluble
	Heavy Aromatic Solvent	Soluble

USAGE As cited previously, the reaction time occurs in the water phase therefore, a preferred application for BEADLEJUICE 9001 in a gas treating situation should be in a bubble tower, where the tower is filled to half of its volume with a mixture of 50% BEADLEJUICE 9001 and 50% fresh water by volume. This type of application is generally more efficient due to the extended contact times and improved mass transfer.

BEADLEJUICE 9001 may also be injected on a continuous basis at the wellhead or upstream of a gas separator. Given the reaction characteristics of this product, the scavenging efficiency will be improved as the water content of the gas increases and as the length of the flowlines increase. As a rule of thumb, minimize water content of the gas should be 5 lbs. per

million SCF. Injection or atomization of BEADLEJUICE 9001 into dry gas stream is not recommended.

The scavenging efficiency of BEADLEJUICE 9001 will depend on contact time, pressure, temperature, gas velocities, moisture content, product concentration, mass transfer and water dilution. Given that each application is unique, further fine-tuning will be required for optimum results. The spent solution is considered non-hazardous.

Theoretically, in excess of 8 lbs. of H₂S may be removed per gallon of BEADLEJUICE 9001. In practice, however, lower values are observed due to the poor mass transfer of the gas into the aqueous phase. Up to a point, by reducing the bubble size of the gas in a contactor tower, the mass transfer may be improved. Depending on the application, and given the above statement, initial treatment rates should be set at between 0.1 to 0.3 gallons of BEADLEJUICE 9001 per ppm of H₂S per million SCF per day. Optimization of these rates should be carried out in the system.

DRILLING

APPLICATION

In drilling applications, once H₂S has been detected, it is recommended that the suction pit be slugged with one drum of the product to saturate the system, thereafter slugging with 5 gallons every tower. Depending on the concentration of H₂S encountered, this application method may prove insufficient to effectively scavenge the influx of H₂S, in which case, continuous injection of the product upstream of the mud pumps may be more appropriate. Once the situation has been brought under control, the rates may be adjusted accordingly.

HANDLING

PRECAUTIONS

For information regarding safety precautions in handling, health hazards, and exposure, please refer to the material safety data sheet for this product. In case of emergency, please call (337) 849-6340.