

SAG* 7133

Description

SAG 7133 antifoam emulsion and its more concentrated version, SAG 220 antifoam emulsion, are excellent candidates for controlling foam in amine and glycol dehydration units. Both have been extensively tested in a variety of gas plants and have demonstrated excellent stability in the presence of salts, resulting in reduced deposits on the plant's equipment. SAG 7133 and SAG 220 help preserve foam control under the severe conditions of a dehydrating unit. These conditions can remove water from other antifoam emulsions, rendering them immediately inactive. SAG 47 antifoam compound is the product of choice if the antifoam is to be stored in extreme climate conditions, especially for very cold weather. It can easily be diluted to reduce its viscosity and actives.

Key Features and Benefits

- Quick foam knockdown - particularly useful when foam suddenly builds up in the absorber and rapid control is needed.
- Excellent antifoam stability and durability - over a period of time the concentration of salts in an amine or glycol dehydration unit can reach high levels. SAG 7133 antifoam emulsion and its more concentrated version, SAG 220 antifoam emulsion, are very stable in their presence. Additionally, lower amounts of antifoam are needed to retain line control, potentially resulting in lower costs and reduced propensity for fouling and clogging. Further, since these products are easily dispersed in water and are compatible with glycols, they do not allow the presence of these glycols to easily remove water from their state of emulsion, thus remaining effective for a longer period.
- Excellent stability at high temperatures - because of their excellent dispersibility. SAG 7133 antifoam emulsion and SAG 220 antifoam emulsion do not show a propensity to deposit on heat exchangers as many other antifoams tend to. Instead, they remain finely dispersed in the amine or glycol solution and are eventually filtered out.
- Easy dilution and use - simple addition of water and minimum agitation is sufficient to dilute SAG 7133 antifoam emulsion and SAG 220 antifoam emulsion to required concentrations. Pumping of the diluted emulsions is easy, due to their low viscosity.
- Reduced clogging or scaling in the heat exchangers - potentially resulting in less service maintenance.
- Low concentrations can provide effective foam control - SAG 7133 antifoam emulsion and SAG 220 antifoam emulsion are often two to three times more effective than other antifoams used in gas treating units.

Typical Physical Properties

Emulsion: Silicone Antifoam Emulsion SAG 7133	
Chemical Nature	Emulsion of a silicone antifoam compound
Appearance	White, homogeneous, slightly viscous liquid

Viscosity at 25°C, cSt	600
Active Ingredients, %	10
Specific Gravity at 25°/25°C	1
pH	7
Emulsion Type	Non-ionic
Suitable Diluents	Water only
Emulsion: Silicone Antifoam Emulsion SAG 220	
Chemical Nature	Emulsion of a silicone antifoam compound
Appearance	White, homogeneous, slightly viscous liquid
Viscosity at 25°C, cSt	600
Active Ingredients, %	20
Specific Gravity at 25°/25°C	1
pH	7
Emulsion Type	Non-ionic
Suitable Diluents	Water only
Compound: Silicone Antifoam Compound SAG 47	
Chemical Nature	Polydimethyl siloxane compound
Appearance	Translucent white
Viscosity at 25°C, (after stirring), cP	2500
Active Ingredients, % by weight	100
Specific Gravity at 25°/25°C	0.988
Emulsifiers	None
Suitable Diluents	Process liquid, hydrocarbons

Potential Applications

SAG 7133 antifoam emulsion, its more concentrated version, SAG 220 antifoam emulsion, and SAG 47 antifoam compound are targeted for gas recovery plants, where natural gas must be washed, or scrubbed, before distribution, and for liquefied natural gas (LNG) plants that must achieve high gas purity before liquefaction.

In many amine units, foam can be problematic. Proper line control without antifoam is, generally, extremely difficult.

General-purpose antifoams have a wide range of applicability, but not all of them are suitable for use in the treatment of gas. Some foam control agents can aggravate the problem. Foam control in gas scrubbers is only one of the process parameters to be monitored. It is equally important to prevent or slow the fouling of the unit, because dismantling of the gas-scrubbing units is manually intensive. Incorrectly specified antifoams can easily lead to increased fouling and clogging, particularly in the heat exchangers. Momentive Performance Materials SAG antifoams are designed to provide foam control with a minimum of such problems.

Patent Status

Standard copy to come

Product Safety, Handling and Storage

Standard copy to come

Limitations

Standard copy to come

Contact Information

For product prices, availability, or order placement, contact our customer service at Momentive.com/CustomerService/

For literature and technical assistance, visit our website at: www.momentive.com

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