SAG* 770 Antifoam

Description

SAG 770 antifoam rapidly controls aqueous foams and continues to inhibit foams in protein and starch solutions. This product combines the efficient durability of traditional silicone antifoams with the quick knockdown of organic defoamers.

Key Features and Typical Benefits

- Increased production throughput in food processing applications
- Rapid knockdown of existing foam
- Long-term foam inhibition in protein and starch solutions
- Superior dispersibility in the foaming media
- Excellent aqueous dispersibility
- Halal Certified [(1)]

(1) This product is produced under the supervision of the Islamic Food and Nutrition Council of America (IFANCA). This product is in compliance with the halal requirements under Islamic laws.

Typical Physical Properties

Appearance	White
Form	Pourable liquid
Specific Gravity at 25/25°C	1.0
Viscosity at 25°C (after stirring), cP	1000-2000
pH	5
Suitable Diluent	Water
Shelf Life, months	24

Typical physical properties are average data and are not to be used as or to develop specifications.

General Considerations for Use

SAG 770 antifoam can be used as received, or after dilution with water or process liquid. For best results, the product should be mixed before use. Dilution can be accomplished by mixing 3 to 10 parts of the selected diluent to 1 part antifoam with gentle stirring until a uniform mixture is obtained. Continued gentle mixing of the diluted antifoam is recommended to ensure product uniformity over extended storage times.

For maximum cost-effectiveness, this antifoam should be prediluted and added continuously at a processing step prior to where foaming is encountered. Suggested starting concentrations are 50 to 400 ppm antifoam, with care being taken in food applications to assure that levels do not exceed the FDA limitations in the final product. Table 3 shows concentrations and parts per million equivalents.

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Table 3: SAG 770 antifoam Concentrations and Parts per Million Equivalents

Concentration of SAG 770 antifoam (from container)	Parts per Million SAG 770 antifoam	
	(As received)	(Active silicone)
1 pint in 1560 gallons	= 80	= 10(1)
10.3 fl. oz. in 100 gallons	= 80	= 10(1)
1 gallon in 1000 gallons	= 1000	= 125
1 gallon in 2000 gallons	= 500	= 62.5

(1) FDA Regulation 21 CFR 173.340 limitation Conversion Factors: 1 gallon = 3.785 liters; 1 pint = 0.473 liters; 1 fl. oz. = 29.57 ml

Compared to traditional silicone antifoams, organic defoamers quickly knock down protein- and starch-stabilized foams. However, traditional silicone antifoams are well known for their durable antifoaming efficiency compared to most organic defoamers.

SAG 770 antifoam is a non-traditional silicone antifoam that combines the quick knockdown of organic defoamers (Table 1) with the durability of silicone antifoams (Table 2), providing excellent foam control in protein- and starch-stabilized foams.

Table 1: Foam Knockdown Efficiency of SAG 770 Foam Control Agent Compared to Typical Silicone Antifoam and Organic Defoamer in Protein Foam (1% Albumin)

Foam Control Agent	Time to Knock Down 20 mL of Foam with Equal Weights of Antifoam, sec
Typical Silicone Antifoam	90
Typical Organic Defoamer	8
SAG 770 Foam Control Agent	9

Table 2: Durability of SAG 770 Foam Control Agent Compared to Typical Silicone Antifoam and Organic Defoamer in Protein Solutions (1% Albumin)

Foam Control Agent	Wt. of Antifoam in 200 mL of Solution, g	Foam Weight Generated at 30 sec of Sparging, mL
Control	0	1000
Typical Organic Defoamer	0.1	440
Typical Silicone Antifoam	0.1	100
SAG 770 Foam Control Agent	0.1	30

Note: Test data. Actual results may vary.

Regulatory Compliance

FDA

Compositionally compliant with 21 CFR 173.340 and is appropriate for consideration for use as a defoaming agent in processing foods in accordance with the conditions specified and limitations imposed by this regulation. Please consult the FDA regulations for specifications and limitations, which may apply. The customer has the sole responsibility for determining that their product complies with all applicable FDA specifications and limitations and is fit for food contact use.

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USDA
May be considered for use in egg washing, fat rendering, hog scalding, curing pickles, and in the preparation of soups and stews.

Kosher Certification
Manufactured under the supervision of the Kashruth Division of the Union of Orthodox Jewish Congregations of America, and is kosher and pareve when bearing the O.U. symbol of certification on the label. The product is kosher for Passover.

Halal Certified
This product is produced under the supervision of the Islamic Food and Nutrition Council of America (IFANCA). This product is in compliance with the halal requirements under Islamic laws.

Patent Status
Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

Product Safety, Handling and Storage
Customers should review the latest Safety Data Sheet (SDS) and label for product safety information, safe handling instructions, personal protective equipment if necessary, emergency service contact information, and any special storage conditions required for safety. Momentive Performance Materials (MPM) maintains an around-the-clock emergency service for its products. SDS are available at www.momentive.com or, upon request, from any MPM representative. For product storage and handling procedures to maintain the product quality within our stated specifications, please review Certificates of Analysis, which are available in the Order Center. Use of other materials in conjunction with MPM products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

Limitations
Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular applications.

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

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

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