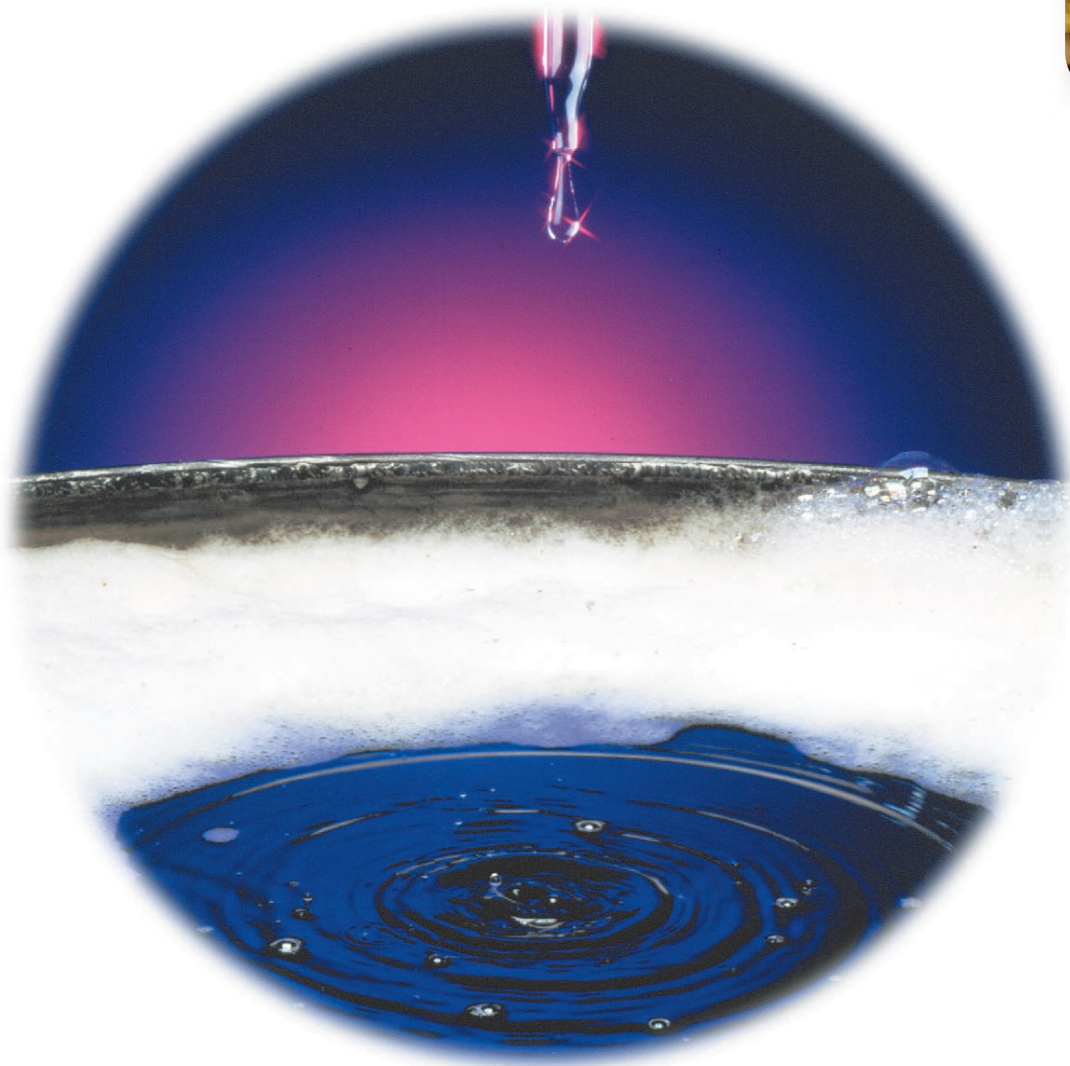




GE Silicones

Silicones In Food Processing

Materials &
Applications



A Global Leader in Silicones

Fluids, Emulsions, And Specialties

The strengths of GE Silicones are deeply rooted in the long and prestigious history of GE technology innovation, technical service, and application engineering. Milestones include the discovery of new chemistries and the birth of breakthrough products. It's also a story about commitment to successful business relationships, about global reach, and about value-added process innovations that can help our customers reduce costs, improve quality, and realize their business objectives.

For 50 years, GE Silicones has pioneered developments in silicone technology for the world's most prominent industries, including chemical manufacturing and processing, aerospace, automotive, personal care, building and construction, consumer hardware, food processing, electronics and business equipment, appliances, and OEM assembly and maintenance.



Performance Silicones

for the Food Processing Industry



Foam is a mass of bubbles created when certain types of gas are dispersed into a liquid and the dispersion is then stabilized. High-strength films of liquid surround the bubbles, forming large volumes of non-productive foam. While the actual cause of foam is a complicated study in physical chemistry, its existence presents serious problems in both the operation of industrial processes and the quality of finished products. If not properly controlled, foam can reduce equipment capacity and increase processing time and expense.

Foam can be controlled by making basic changes in the process itself or by using mechanical defoaming equipment. However, chemical defoamers have proven to be effective and economical.

An effective chemical defoaming agent must meet the following requirements:

- Possess lower surface tension than the system to which it is added.
- Disperse readily in the system.
- Possess poor or low solubility (incompatibility) in the system.
- Inert.
- Leave no substantial residue or odor.
- Meet FDA and USDA requirements where applicable.
- Certified Kosher* and Pareve where applicable.

These requirements are met most effectively with silicone antifoams.

Value Drivers

- FDA and USDA compliant.
- Certified to be Kosher* and Pareve.
- May be ordered in plastic sturdy totes. These totes have been upgraded to include 4-way pallet access and a stackable tote height of 3. The totes also have a 2" full port outlet valve connection.
- Easily dilutable, customer uses in low concentrations and promotes ease and accuracy of addition into the foaming process.
- Local GES authorized distribution provides regional inventory and other value added services.

Where to Sell

- Canned fruits, vegetables, jams and jellies.
- Potato chip/snack manufacturing
- Canned and cured seafood
- Tofu
- Cane sugar refining
- Wine
- Meat and poultry rendering
- Fruit juice packaging
- Bean and vegetable processing

How to Sell

- Easily dilutable, customer uses in low concentrations and promotes ease and accuracy of addition into the foaming process.
- Percent silicone content varies. Allows for application-specific product selection.
- Prevents foam formation when added to the system before foam generating process.
- Excellent technical support.



Product/Application Selector Guide

GE Product	SIC Code	Application	Value Driver
AF9000	2079, 2099, 2869	Vegetable oil manufacturing, yeast processing, food preparations, NEC.	FDA Compliant – easily dilutable – highly effective in very low concentrations – certified Kosher*, Pareve, and USDA regulated.
AF9010, AF9020, AF9030	2063, 2062, 2087, 2033, 2096, 2091, 2046, 2099, 2062, 2047, 2015, 2044, 2037, 2022, 2067	Beet sugar processing; syrup, flavoring fruit, clam, and tofu manufacturing; wet corn milling, cane sugar refining. Dog and cat food processing. Rice processing, fruit juice packaging. Chewing gum. Poultry processing.	FDA Compliant – easily dilutable – glossy appearance on store shelves – certified Kosher*, Pareve and USDA regulated.
SF18-350	2631, 2656, 2673, 2676	Paper towel and cup release agent, food packaging. Disposable food packaging, food handling.	FDA Compliant – easily dilutable – certified Kosher* and Pareve – excellent lubricity.
SM2128	2834, 3089, 3086, 2657, 2655, 2676, 2656, 2673	Food grade plastic mold release, lubricant for center mandrel of paper juice can manufacturing, coating for inside of ice cream containers, paper towel and cup release agent. Disposable food packaging, food handling.	FDA Compliant – easily dilutable – solventless – excellent lubricity.

*AF9000 Series and SF18-350 are certified Kosher. Kosher for Passover certification coming in fall 2000. Ask your sales representative for details.



Competitive Offset Guide

GE Product	Dow Corning	Wacker	Rhône-Poulenc	OSI	Huls	Shin Etsu
AF9000	AF-A, C120, DB100, DC1500, MSA, SILAYD7	BS15, Q53, Q67, Q707, Q746, Q749, SS2201, SWS-203, SWS-8122	20464, 70451, 70452, 70454, 461LV	SAG-100, SAG-47, SAG-471, SAG-840, SAG-5693	4502, 4503, 4504, 4505, 4521	KS66, KS69
AF9010	AFB, B Emulsion, DB110, DB110A, DC1410, DC1510, DC2210, FG-10, H-10 Emulsion	Q93, SE2, SE3, SE47, SS215, SWS-211, SWS-214	R-4710AC, SIH	Mark X, SAG-10, SAG-470, SAG-471, SAG-710, SAG-2001, SAG-760 LV, SAG-1010	NE30	
AF9020	DC1520, DC1550			SAG-720	NE4541, NE4562	
AF9030	AF Antifoam, AFC, DB31, DC1430, C Emulsion, Q2-3183A, Q2-3266, Y-30 Emulsion	Q73, Q75, Q94, SS213, SWS-213	20432, RA-4730	SAG-30, SAG-470, SAG-472, SAG-730, SAG-770, SAG-5441	4540, 4542, 4543, 4544, 4545, 4546, 4551, 4561	
SF18-350	200, 200-350	SWS-101	41, 45, 70047	L-45		
SM2128	DC24, FG-24		E2436, E35, E36, Rhodorsil Emulsion E1P	Formasil 45, LE-45	NE4707	



To Find Out More...

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Company & Product Info

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- Technical assistance/inquiries
- Application review
- Product recommendations
- Sales support

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- Specification reviews

Product Literature

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GE SILICONES FDA REGULATED FOOD CONTACT APPLICATION GUIDANCE

GE Silicones is a supplier of industrial grade raw materials. GE Silicones may provide bulk raw materials to customers for use in FDA regulated food contact applications and may provide formulation recommendations and processing assistance with those raw materials. GE Silicones will not knowingly promote the use of our products or sell to applications in which our products are implanted into the human body for 29 days or longer, are injected into the body or used for contraceptive purposes. GE Silicones will carefully evaluate participation in applications that involve exposure to infants, children and pregnant or nursing mothers.

GE Silicones maintains files which document the FDA compliance status of the ingredients of products which it may offer for use in FDA food contact regulated applications. GE Silicones has also conducted extractive limitation tests (where applicable) which must be met in order to claim compliance. Manufacturers are cautioned to evaluate the level of extractives (where applicable) under your specific curing and post-baking conditions. These test results are based on single lots of GE Silicones' material and should not be construed as a warranty of fitness for use. Contact the GE Silicones Regulatory Compliance office for copies of test reports.

Customers are also cautioned to consult specific FDA food contact regulations for conditions and limitations of use.

It is the sole responsibility of the purchaser to select a particular GE Silicones product and determine its suitability for an application and to comply with all applicable statutory, regulatory, compatibility and industry requirements and standards for testing, safety, efficacy and labeling.

LIMITED WARRANTY

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