Technical Data Sheet

XIAMETER™ PMX-200 Silicone Fluid, 350 cSt, Food Grade

Dimethyl polysiloxane surface treatment, release material, lubricant and processing aid in food processing and packaging applications

Features & Benefits

- Inert
- Harmless to metals and most plastics
- Certified for use in the processing of kosher foods

Composition

- Dimethyl polysiloxane fluid

Applications

- Primarily used as a surface treatment, release material, lubricant and processing aid in food processing and packaging applications. Some of these include rendering and edible oil processing.

Typical Properties

Specification Writers: These values are not intended for use in preparing specifications.

Property	Unit	Result
Color		Water white
Consistency		Light syrup
Active Ingredients	percent	100
Specific Gravity at 25°C (77°F)		0.97

Description

XIAMETER™ PMX-200 Silicone Fluid, 350 cSt, Food Grade, is a clear, water-white, dimethyl polysiloxane fluid. This 100 percent silicone fluid is designed for use in food processing or in other applications where a food-grade product is desired.

XIAMETER™ PMX-200 Silicone Fluid, 350 cSt, Food Grade, can be added to nonstandardized foods in amounts up to 10 parts per million. These foam control applications are generally in nonaqueous systems such as vegetable oil processing.

Form No. 95-518-01-0520 S2D

FDA Status

The use of XIAMETER™ PMX-200 Silicone Fluid, 350 cSt, Food Grade, as a defoaming agent is permissible in nonstandardized foods (other than milk) in amounts up to 10 parts per million under the Federal Food, Drug and Cosmetic Act. Any limitations on use in standardized foods, or the like, should be observed. This product can be used in the manufacture of such food-packaging materials as paper and paperboard, animal glues, adhesives and other packaging materials, subject to appropriate limitations on extractables. See FDA regulations 21 CFR 173.340, 175.300, 176.210, 175.105, 176.170, 178.3120 and 177.1210.

EPA Status

Exempt from tolerances at 40 CFR 180.910, 40 CFR 180.920 and 40 CFR 180.960.

Kosher Status

Kosher certified product available.

Halal Compliance

Please contact your local representative for current Halal compliance documentation.

European Community Directives

- 95/2 Part 1/2 – Jam, jellies and marmalades as defined in Directive 79/693/EEC and similar fruit spreads, including low-calorie products: maximum 10 mg/kg. Soups and broths: maximum 10 mg/kg. Oils and fats for frying: maximum 10 mg/kg. Confectionery (excluding chocolate): maximum 10 mg/kg. Non-alcoholic flavored drinks: maximum 10 mg/L. Pineapple juice maximum: 10 mg/L. Canned and bottled fruit and vegetables: maximum 10 mg/kg. Chewing gum: maximum 100 mg/kg.
- 95/2 Part 2/2 – (pro memoria) Wine in accordance with Regulation (EEC) No. 1873/84 authorizing the offer or disposal for direct human consumption of certain imported wines that may have undergone oenological processes not provided for in Regulation (EEC) No. 337/79. S¢d...saft: maximum 10 mg/L. Batters: maximum 10 mg/kg. Cider (excluding cidre bouché): maximum 10 mg/L. Flavorings: maximum 10 mg/kg.
- 90/128/EC – The EU Directive 2002/72/EC and its amendments up to and including Directive 2004/19/EC, relating to plastic materials and articles intended to come into contact with foodstuffs.

Origin of Ingredients

XIAMETER™ PMX-200 Silicone Fluid, 350 cSt, Food Grade, contains ingredients that have been prepared solely from synthetic sources. It does not contain any genetically modified organisms or materials of animal origin.

How to Use

Amount Needed for Defoaming

In nonaqueous food defoaming applications, the user should start addition at a concentration that will not exceed 10 parts per million in the finished product. From that starting point, the user should reduce the amount of defoamer until the minimum quantity that will effectively control the foam is determined.

Methods of Introduction into Foamer

XIAMETER™ PMX-200 Silicone Fluid, 350 cSt, Food Grade, can be introduced into the foaming system in two ways: (1) as supplied or (2) as a mixture with one of the components of the foaming system.

How to Use (Cont.)

Use as Supplied
In some applications, the defoamer can be used to limit foam height by the simple method of wiping onto an element of the processing equipment. For example, the defoamer is often wiped on nozzles of bottle-filling machines to knock down foam as it rises in the neck of the bottle.

Mixing with a Component of the Foamer
In some processing applications, the silicone foam preventive can be mechanically dispersed in one of the ingredients of the foaming system using a high-speed blender or propeller-type mixer. This mixture is then added directly to the batch according to the normal procedure for the particular process.

Use in Other Processing Applications
In food processing and packaging applications, the silicone fluid can be applied without dilution by wiping or spraying. Better lubrication and release are often obtained by applying a thin film after first diluting the fluid with a suitable solvent to a concentration of one half to three percent of silicone.

Note: FDA status, lack of any residue and flammability of the solvent must, of course, be considered for the particular use.

Table 1: Conversion Table

In many applications, it may be desirable to convert figures in parts per million to other units. The table below provides some equivalents:

Parts Per Million of Antifoam (ppm)	Percent	Ounces per 1000 Gallons[1]	Ounces per 1000 Pounds
1	0.0001	0.128	0.016
10	0.001	1.28	0.16
33.3	0.003	4.26	0.53
100	0.01	12.8	1.6

1. When foamer has specific gravity of 1.000.
   1 ounce = 2 tablespoons = 6 teaspoons
   1 pound = 2 cups = 1 pint
   To calculate the amount of antifoam required, consult the simple addition rate chart in Table 2.

Handling Precautions

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW WEBSITE AT DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

Usable Life and Storage

Product should be stored at ambient temperatures in original, unopened containers.

Limitations

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

Health and Environmental Information

To support customers in their product safety needs, Dow has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area.

For further information, please see our website, dow.com or consult your local Dow representative.

Disposal Considerations

Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations. Contact your Dow Technical Representative for more information.

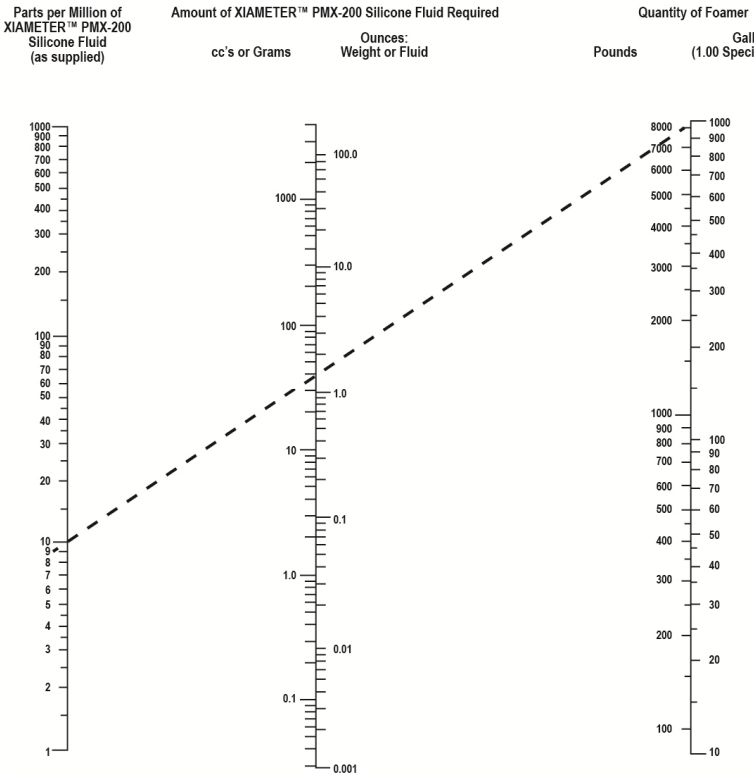
Product Stewardship

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products - from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

To calculate the amount of XIAMETER™ PMX-200 Silicone Fluid, 350 cSt, Food Grade defoamer for your applications, consult the addition rate chart below.



INSTRUCTIONS:
On the left-hand scale, find the parts per million of **XIAMETER™ PMX-200** Silicone Fluid that you wish to use. Then, on the right-hand scale, locate the number of gallons or pounds of foamer in your system. With a straight-edge, draw a line through these points. The amount of **XIAMETER™ PMX-200** Silicone Fluid can be read where this line crosses the center scale; ounces on the right-hand portion of the center scales and grams on the left-hand portion of the same scale.

Example: It is desired to use 10 ppm of **XIAMETER™ PMX-200** Silicone Fluid to defoam 1000 gallons (8335 pounds) of foamer. A line (dotted) is drawn between these points. It crosses the center line at approximately 1.28 ounces.

Table 2: Addition Rate Chart

dow.com