

# Antifoam Silicone Fluids for the Oil & Gas Industry

Chemical Name: Polydimethylsiloxane Fluid / PDMS Silicone Oil

CAS No. 63148-62-9



Silicone Fluids for Antifoam are 100% PDMS Silicone oils that are widely used in Oil&Gas / Refinery operations to prevent and reduce process foams.

## [View Polydimethylsiloxane Properties Chart](#)

**Synonyms:** Silicone Antifoam, Antifoam silicone fluid, silicone oil for foam control, silicone foam control agent, antifoam silicone fluids, antifoam silicone oil, antifoam, silicone oils, High Viscosity PDMS silicone antifoam fluid, High Viscosity PDMS silicone antifoam fluids, High viscosity silicone damping fluid, high viscosity silicone damping fluids, high viscosity polydimethylsiloxane oil, high viscosity polydimethylsiloxanes, silicone damping fluids for gauges, aviation damping fluids, PDMS, PDMS low viscosity, PDMS damping fluid, silicone damper fluid, silicone damper fluids, low temperature silicones, Silicone Fluid, low viscosity linear polydimethylsiloxane, linear PDMS fluid, polydimethylsiloxane, polydimethylsiloxanes, PDMS, PDMS Silicone Oil, PDMS Silicone Oil, 1,000cSt, PDMS Silicone Oil, 12,500cst, PDMS Silicone Oil, 30,00cSt, PDMS Silicone Oil, 60,000cSt, PDMS Silicone Oil, 100,000cSt, PDMS Silicone Oil, 1,000,000cSt, PDMS Silicone oil for Oil & Gas Exploration, PDMS Silicone oil for Oil & Gas, silicone oil for gas-oil separation, silicone oil for gas dehydration, PDMS Silicone oil for crude distillation, silicone oil for cracking process, silicone oil for asphalt processing, PDMS silicone oil for asphalt processing, silicone oi for foam control, silicone oil for use as foam control agent, Polydimethylsiloxane silicone for asphalt, Polydimethylsiloxane silicone oil for asphalt processing, PDMS silicone oil for delayed coking, buy silicone oil, buy PDMS Silicone Oil, buy PDMS Silicone Fluid

**VIEW PRODUCT SPECS:** [Silicone Antifoam Fluids for foam control](#)

### VIEW SDS:

[PSF-1,000cSt Antifoam Silicone Fluid](#)  
[PSF-12,500cSt Antifoam Silicone Fluid](#)  
[PSF-60,000cSt Antifoam Silicone Fluid](#)  
[PSF-100,000cSt Antifoam Silicone Fluid](#)  
[PSF-600,000cSt Antifoam Silicone Fluid](#)  
[PSF-1,000,000cSt Antifoam Silicone Fluid](#)

**AVAILABILITY:** 1-gallon (3.785 liters), 5-gallon pail (18.9 liters) & 55-gallon drum

**PRODUCT EQUIVALENT:** DC 200®, Fluid 12,500 cs, DC 200®, Fluid 60,000cs, DC 200®, Fluid 100,000 cs, Xiameter® PMX-200 Silicone Fluid, 12,500cSt, Xiameter® PMX-200 Silicone Fluid, 60,000cSt, Xiameter® PMX-200 Silicone Fluid, 100,000cStGE Viscasil® 12M, GE Viscasil® 60M, GE Viscasil® 100M, Element 14® PDMS 12K, , Element 14® PDMS 60K, Element 14® PDMS 100K

**DESCRIPTION:** Antifoam Silicone Fluids are 100% Polydimethylsiloxane fluids / PDMS Silicone Oils that range in viscosities from 1,000cSt to 1,000,000cSt (centistokes) @ 25°C. In the Oil and Gas industry, PDMS Silicone Fluids are the most effective fluids in reducing process foam in production, refinery and gas processing plants.

PSF Antifoam Silicone Fluids are characterized by their hydrophobic nature, wide service temperature range, high thermal stability, low viscosity change at temperature, high resistance to oxidation, high flash points, low vapor pressure, stability at high pressures, low toxicity and inertness to most materials.

Antifoam Silicone Fluids are insoluble in crude oil but highly soluble in a wide range of conventional solvents such as toluene, xylene, diesel or naphtha. The suggested starting dilution ratio is 20ppm pre-diluted with one of the named solvents and added continually with a meter pump.

### Product Data

Viscosity (cSt)	Specific Gravity	Pour Point	Flash Point (open cup)	Surface tension	V.T.C	Thermal Expansion (cc/cc °C)	Thermal Conductivity g cal/cm•sec• °C
1,000	0.971	-50°C	315°C	21.2	0.61	0.00096	0.00038
12,500	0.975	-48°C	315°C	21.5	0.61	0.00096	0.00038
60,000	0.975	-42°C	315°C	21.5	0.61	0.00096	0.00038
100,000	0.975	-41°C	321°C	21.5	0.61	0.00094	0.00038
1Mil	0.978	-39°C	321°C	21.6	0.62	0.00092	0.00038

### Fluid per Application in Oil & Gas / Refinery Operations

Viscosity (cSt)	Oil/Gas Separation	Delayed coking	Crude Distillation	Vacuum Distillation	Cracking Process	Asphalt Processing
1,000				Yes	Yes	Yes
12,500	Yes			Yes		
60,000	Yes	Yes	Yes	Yes		
100,000	Yes	Yes				
600,000	Yes	Yes				
1Mil	Yes	Yes				

**PROCESSES INCLUDE:**

- Gas-Oil Separation
- Gas Dehydration & Gas Scrubbing
- Crude Distillation
- Cracking Process
- Asphalt Processing
- Delayed Coking

**PROPERTIES:**

- |   |   |
|---|---|
| <ul style="list-style-type: none"><li>• 100% PDMS Silicone Oils</li><li>• High Flash Points</li><li>• Wide Service Temperature Range</li><li>• High Resistance to Oxidation</li><li>• Insoluble in Crude Oil</li><li>• Highly soluble in petroleum based solvents</li><li>• High Damping Action for vibration &amp; sound</li><li>• Low viscosity change at temperature (low VTC)</li><li>• Stable at extreme pressures of Downhole, Drilling and Subsea environments</li></ul> | <ul style="list-style-type: none"><li>• Hydrophobic Nature</li><li>• Low Vapor pressure</li><li>• Excellent Lubricant for O-rings, gaskets, valves &amp; seals</li><li>• High Dielectric Strength</li><li>• Inert to virtually all components</li><li>• Excellent Lubricity</li></ul> |
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**Antifoam Silicone Fluids** are also used in a wide range of Oil&Gas, military and industrial applications to dampen vibration, dampen pulsation, and dampen torque. The other main application is for use in Flow Control, Temperature Control and Pressure Control Instruments.

**High Viscosity Silicone Damping Fluids** are particularly effective for use in instruments and gauges that require the highest damping action against vibration, sound and amplitude of motion. By nature, silicone fluids are hydrophobic and prevent humidity from entering the gauge/instrument housing. This is very important. At low temperatures, water condensation can freeze and cause damage to the sensitive parts within the gauge/instrument housing. Ultimately, **Silicone Damping Fluids** will extend the service life of the equipment that it fills and provide more accurate readings even in the harshest of conditions.

Other applications include: pressure gauges, pressure control instruments, pressure testing equipment, temperature testing equipment, temperature control equipment, pumps, pipeline equipment, flow testing equipment, flow level sensors, electronic sensors, level controllers, rotary dampers, geothermal monitoring equipment, seismology instruments, temperature recorders, temperature measurement equipment, process instruments, process recorders, level sensors, control valves, calibration equipment, flow control instruments, laboratory research instruments, digital display meters, gravity meters, testing equipment, testing instruments, monitoring equipment, pulsation dampeners, level instruments, electro hydraulic actuators, flow meters, thermostats, industrial thermometers, dashpots, aviation instruments, aviation gauges, electronic timer systems, control cables, optical instruments, aviation gyroscopes, process control equipment, test equipment, shock testing equipment, high pressure gauges, subsea gauges, process gauges, subsea instruments, subsea cables, shock dampeners for R/C vehicles, underwater vehicles, deep sea instruments, deep sea lighting equipment, deep sea cameras, deep sea sensors, deep sea robotics, liquid filled gauges, level controllers, rotary dampers, temperature and process recorders, control valves, calibration equipment, flow meters, thermostats, industrial thermometers, dashpots, monitoring systems, avionic gauges and aviation instruments

**Environmental:** High Viscosity Silicone Fluids are exempt from Federal VOC regulations, including California (CARB) and OTC regulations. They are HAP-free and do not contribute to ozone-depletion and global warming. In addition, they meet RoHS Compliancy.