

PolySi Technologies



P

olySi Technologies
Silicone Lubricants
beat Brand Names
in Price, Quality &
Packaging Alternatives



How Does PolySi Technologies Do It?

PolySi Technologies beats industry brand names in price, quality and packaging alternatives by manufacturing and packaging silicone lubricants in one location with batch processing to ensure quality control. Manufacturing silicone greases allows us to monitor and control the quality of products being produced and packaged, which is essential in achieving QS9000 certification. With over 35 formulations and dozens of packaging options sold worldwide, PolySi Technologies is quickly becoming an industry leader in silicone materials.

◀ SILICONE GREASE ▶

PolySi Technologies' silicone greases offer excellent dielectric properties, extreme high and low temperature capabilities (-100 - 400 F), water resiliency, and oxidation resistance. These characteristics make our silicone greases excellent for lubricating, coating and sealing plastic and rubber parts. The silicone based materials reduce friction and provide long lasting lubrication not found in traditional lubricating materials. Typical applications include: brake calipers, computer equipment, printers, medical equipment, faucet o-rings, cable TV connectors and communication equipment.



◀ THERMALLY CONDUCTIVE GREASE ▶

PolySi Technologies manufactures several types of thermally conductive silicone greases. These materials are designed to dissipate heat through the elimination of air voids surrounding critical components. These materials are thickened with metal oxides such as zinc or aluminum and can be customized around your application. Typical applications include: transistors, electronic devices, heat wells and flyback transformers on TV sets.

◀ MILITARY SPECIFIED LUBRICANTS ▶

PolySi Technologies' lubricants meet the requirements for military specifications and QPL listed materials. Military specifications include Mil-S-8660C, Mil-C-21567, W-D-1078, Mil-G-6032, Mil-C47113B Type I and Mil-G-4343C. Applications for these materials include: high tension electrical connectors for aircraft and automotive engines, sealing and insulating electronic equipment, o-ring lubricants and corrosion prevention on dissimilar metals. The military specified lubricants are available in bulk or specialty packaging upon request.



◀ ELECTRICAL APPLICATIONS ▶

PolySi Technologies' silicone greases have excellent dielectric properties where electrical insulating properties are required. Typical applications include: separable connectors (elbows), wire splices, electrical and electronics equipment, high voltage insulators, household appliances (microwaves, blenders), automotive applications (e.g. spark plug boots, distributor caps, and electrical connectors) and marine industry connectors.

◀ SILICONE LUBRICATING FLUIDS ▶

PolySi Technologies offers a full line of silicone fluids. The wide range of viscosities from 1 cst-600,000 cst provide many alternatives to solve your lubricating needs. The fluids include dimethylpolysiloxane, methylphenyl fluids, and alkyl blends. These materials are commonly used to lubricate o-rings extending the life and reducing the wear, mold releases, release agents, diluent fluids, dampening media and rubber components.

APPROVALS/CERTIFICATIONS

QS 9000 ('99) NSF Standard 61 for drinking water (PST-599)

FDA Compliance 21CFR 175.300 Lubricants for Incidental Food Contact.

Military Specified Lubricants PST-504 Meets Mil Spec 8660 C; PST-597 Meets Mil Spec C-21567A; PST-540 Meets Mil Spec C-47113; PST-455 Meets Mil-G-4343 C; PST-433 Meets Mil-G-46884 type II

COMPETITIVE OFFSET

POLYSI TECHNOLOGIES	Dow Corning	Novagard(GE)	Rhone Poulenc	NFO/ Century Lubricants	ShinEtsu	Wacker	American Safety (NORLABS)
PST-503		G623	V-726			W-292	SG131
PST-504	DC4	G624	V-624	Chemplex 710	KS 64	W-294	SG191
PST-507	DC-7	G627	V-727			W-295	SG146LV
PST-511	DC 111	G661	V-711	Chemplex 825	HIVAC 62	W-290	SG146
PST-515							
PST-516							
PST-535	DC5	G635			KS 609	W-299	SG181/182
PST-540	DC340	G641	V-740	Chemplex 1381	G-746		SG841
PST-552		G642	V-742				
PST-587		G687	V-787				SG887
PST-0597	DC6	G697	V-797				SG197
PST-599		G662					SG148
PST-433	DC33	G321	Grease 33		G30M		
PST-441	DC41						
PST-444	DC44						
PST-455	DCD55		V-755				
PST-3451	DC3451						
PST-3452	DC3452						
PST-801	DC200-100cst	SF96-100 cst					
PST-803	DC200-350cst	SF96-350cst					
PST-805	DC200-500 cst	SF96-500cst					
PST-810	DC200-10000cst	SF96-1000cst					
PST-828							
PST-831							
PST-841	DC200-100,000	SF96-100,0000					
PST-50		G300					

NOTE: PolySi Technologies also offers silicone fluids, RTV's gels, and mold making material. Call for application offset.

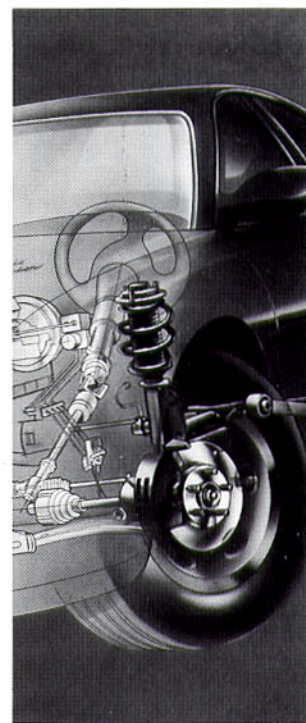


◀ CONTRACT PACKAGING ▶

From Liquids to Thick Pastes in Tubes, Pouches, Bottles, and Cans
PolySi Technologies packaging division offers numerous packaging options for a variety of products. Tube filling is available in either metal or plastic, with sizes ranging from .5-14 oz. and pouches from .5 - 14 grams. We offer private labeling programs utilizing our turnkey operation of manufacturing silicone grease, packaging and labeling. Private label programs are also available for other types of silicone and non-silicone products. We have additional capabilities that include: blister cards, shrink wrapping, boxing, and re-packaging. If you have a product that needs packaging, PolySi Technologies is the place to have it done right! Call (440) 327-3333.

◀ AUTOMOTIVE APPLICATIONS ▶

PolySi Technologies offers a variety of silicone lubricants used throughout the automotive industry. These materials are sold to both OEMs and Automotive Aftermarket customers in a variety of packaging sizes. Applications include: brake calipers, spark plug boots, distributor caps, windshield wiper motors, o-ring lubes, electrical connectors and plastic gears in mirrors.



Physical Property Profile

◀ SILICONE GREASES ▶

PRODUCT	APPEARANCE	PENETRATION RANGE	BLEED 200°C 24 Hrs.	EVAPORATION 200°C 24 Hrs.	SPECIFIC GRAVITY	TEMPERATURE RANGE
PST 503	Translucent Paste	200-300	5% max	3% max	1.03	-40 to 204°C (-40 to 400°F)
PST 504**	Translucent Paste	200-310	8% max	2% max	1.03	-55 to 204°C (-65 to 400°F)
PST 507	Translucent Paste	260-350	10% max	3% max	1.03	-40 to 204°C (-40 to 400°F)
PST 511	Translucent Paste	200-300	1% max	2% max	1.03	-40 to 204°C (-40 to 400°F)
PST 515	Translucent Paste	230-290	.95% max	2% max	1.0	-40 to 204°C (-40 to 400°F)
PST 516	Translucent Paste	200-300	1% max	1% max	1.03	-20 to 232°C (-20 to 450°F)
PST 535	Translucent Paste	200-300	10% max	3% max	1.04	-73 to 204°C (-100 to 400°F)
PST 540	White Paste	240-320	2% max	2% max	2.4 min.	-57 to 204°C (-70 to 400°F)
PST 555	Translucent/White	200-290	1% max	2% max	1.0	-40 to 204°C (-40 to 400°F)
PST 552*	White Paste	240-320	2% max	2% max	2.4 min.	-45 to 175°C (-50 to 350°F)
PST 587	Translucent/White	200-300	1% max	3% max	1.03	-55 to 204°C (-65 to 400°F)
PST 597*	Light Tan Paste	260-320	4% max	2% max	1.03	-57 to 204°C (-70 to 400°F)
PST 599***	Translucent/White	210-295	1.5% max	2.5% max	1.04	-40 to 204°C (-40 to 400°F)

* Bleed and Evaporation at 150°C for 24 hours.

** Bleed and Evaporation at 200°C for 30 hours.

*** Certified NSF Standard 61 for drinking water

PRODUCT	APPEARANCE	PENETRATION RANGE	BLEED 150°C 24 Hrs.	EVAPORATION 150°C 24 Hrs.	SPECIFIC GRAVITY	TEMPERATURE RANGE
PST 422	Yellow to Purple	280-330	15% max	3% max	.95 + .03	-50 to 175°C (-60 to 350°F)
PST 433	Yellow	260-300	4% max	3% max	.99 + .03	-73 to 204°C (-100 to 400°F)
PST 451**	Tan Paste	260-300	12% max	2% max	1.05 + .03	-40 to 204°C (-40 to 400°F)
PST 455*	Reddish	260-300	5% max	2.5% max	1.02 + .03	-54 to 175°C (-65 to 350°F)

* Bleed and Evaporation 100-C for 30 hrs.

** Bleed at 150-C for 100 hours. Evaporation at 150- for 50 hours.

Lubricating Silicone Fluids

PRODUCT	DESCRIPTION	VISCOSITY at 25°C
PST 801	Dimethylpolysiloxane	100 CPS
PST 803	Dimethylpolysiloxane	350 CPS
PST 805	Dimethylpolysiloxane	500 CPS
PST 810	Dimethylpolysiloxane	1,000 CPS
PST 811	Dimethylpolysiloxane	10,000 CPS
PST 813	Dimethylpolysiloxane	30,000 CPS
PST 816	Dimethylpolysiloxane	60,000 CPS
PST 822	Methylalkylpolysiloxane	100 CPS
PST 823	Methylalkylpolysiloxane	300 CPS
PST 831	Methylalkylpolysiloxane	100 CPS
PST 841	Dimethylpolysiloxane	100,000 CPS
PST 846	Dimethylpolysiloxane	600,000 CPS
PST 850	Chloronatedphenylmethylpolysiloxane	75 CPS
PST 851	Methylphenylpolysiloxane	200 CPS