

> Bluestar Silicones Pastes and Greases: choosing performance

On the strength of their mixed mineral and organic origin, Bluestar Silicones Pastes and Greases feature a range of outstanding properties:

- Stability over time and over a wide range of operating temperatures (from - 60°C to + 200°C).
- Outstandingly chemically inert: resistance to oxidation and chemical agents as well as natural ageing (UV, weathering, ozone, etc.).
- Very hydrophobic (resistant to weathering).

And more precisely:

> For pastes

- Very good dielectric characteristics giving outstanding electrical insulation properties.
- Excellent protection against corrosive atmospheres and conductive or abrasive dusts.
- High level of release properties.

> For greases

- Good lubricating power in a wide range of temperatures.
- Resistance to oxidation and corrosion.
- Good wash-out resistance.
- Very high drip point.

Bluestar Silicones Pastes and Greases are sold in various packs including tubes, 200kg drums and 1 or 5kg tins.

As for all of our products, our direct sales network, backed up by our local specialist distributors, provides high-performance services.



Bluestar Silicones Pastes and Greases

> A wide range of products for your applications

Covering a very wide range of viscosities, Bluestar Silicones Pastes and Greases are ideal for a host of technical applications: from extreme temperature lubrication or lubrication in contact with oxygen, to protection of oil rig probes, and including high voltage electrical insulation.



> Automotive

- Lubricating devices and vehicles exposed to cold and hot conditions: gearboxes, starter units, etc.
- Heat protection and evacuation: high thermal conductivity pastes: alternators.

> Domestic appliances

- Lubricating moving metal parts.

> Electrical distribution

- Protective paste for high voltage glass and ceramic insulators and lightning surge arresters.
- Protection of circuit breakers, cable ends and electrical distribution accessories in industrial atmospheres or harsh climatic conditions.

> Oil extraction

- Protection of oil rig probes.
- Lubricating of valves, gears and mechanical assemblies.



> Aeronautics

- Lubricating devices susceptible to mechanical impacts and subject to extreme conditions.

> General industry

- Lubricating water distribution circuit valves.
- Lubricating domestic and industrial tap work.
- Lubricating smaller assemblies or mechanisms (plastic/plastic, plastic/metal): plastic gears, pins, video cassettes, etc.
- Anti-seizing (production line and maintenance).

Pastes and Greases Applications

		Paste 4	Paste 5	Paste 7	Paste 340	Paste 408	Paste B431	Paste 78
Protection	Electrical insulation	■	■			●	●	
	Thermal dissipation				■			
	Humidity	■				■		
	Corrosion						■	
Lubrication	General purpose							
	Extreme temperatures: Cold						■	
	Extreme temperatures: Hot							
	Vacuum							
	Rubber swelling							
	Tap release applications							
Sealing	Demolding			■		●		
	Casings	■					■	
	Optic cables: land							
	Optic cables: underwater							■

■ Recommended product
● Other possible usage

Properties

		Paste 4	Paste 5	Paste 7	Paste 340	Paste 408	Paste B431	Paste 78
Physical properties	Color	Translucent to whitish			White			
	Specific gravity at 25°C	1,00	1,00	1,00	2,20	1,01	1,10	1,06
	Worked preparation (mm/10) ⁽¹⁾	< 260	< 250	< 350	280	280	390	300
	Rested preparation (mm/10) ⁽¹⁾	200	210	270	270	270	370	290
	Exudation (%) ⁽²⁾	< 6	< 7	< 10	< 1,5	< 0,5	-	< 0,5
	Evaporation (%) ⁽²⁾	< 2	< 3	< 5	< 1,5	< 3	< 3	< 0,8
	Drip point (°C) ⁽³⁾	-	-	-	-	-	-	> 250
Thermal properties	Service temperatures (°C)	- 40 to + 200	- 40 to + 200	- 40 to + 200	- 40 to + 200	- 40 to + 200	- 60 to + 200	- 30 to + 200
	Thermal conductivity at 25°C (W/mK)	0,21	-	0,21	0,41	0,19	0,25	-
Dielectric properties	Dielectric strength (kV/mm) ⁽⁴⁾	> 20	> 20	-	> 15	> 20	> 20	-
	Dielectric constant at 1kHz ⁽⁵⁾	2,6	2,9	-	3,5	2,5	2,6	-
	Dissipation factor at 1kHz ⁽⁵⁾	5,0.10 ⁻⁴	2,5.10 ⁻³	-	5,0.10 ⁻³	3,0.10 ⁻³	2,0.10 ⁻³	-
	Transversal resistivity (Ωcm) ⁽⁶⁾	> 1.10 ¹³	> 1.10 ¹³	-	> 1.10 ¹³	> 1.10 ¹³	> 1.10 ¹³	-
Storage	Shelf life from the production date (months)	36	36	36	18	36	36	60

(1) NF T 6012, ASTM D 217, DIN 51804
(2) After 24h at 200°C
(3) ASTM D 566

(4) NFC 26225, ASTM D419, IEC 243
(5) NFC 26230, ASTM D150, IEC 250
(6) NFC, ASTM D257, IEC 93

Paste 90	Paste 92	Paste M494	Paste M496	Silbione Paste 70428	Tap Grease	Vacuum Grease	Grease 33	Grease 44	Grease 55
			■						
		■							
							■		
								■	
						■			
									■
		■		■	■				
		■							
■	■								

Paste 90	Paste 92	Paste M494	Paste M496	Silbione Paste 70428	Tap Grease	Vacuum Grease	Grease 33	Grease 44	Grease 55
Translucent to whitish					Translucent to whitish		Brown		
1,00	1,00	1,00	1,00	1,10	1,00	1,00	1,03	1,05	1,00
330	360	270	240	430	< 260	200	280	260	280
320	325 16h to 10 °C	240	220	400	200	190	250	250	270
< 1	< 1	< 8	< 6	< 0,5	< 8	< 0,5 to 150 °C	< 4 to 150 °C	< 2 to 150 °C	< 5 to 100 °C
< 1	< 1	< 2	< 0,5	< 3	< 3	< 2	< 3 to 150 °C	< 4 to 150 °C	< 2,5 to 100 °C
> 250	> 250	-	-	-	-	-	210	205	205
- 50 to + 200	- 40 to + 200	- 50 to + 200	- 40 to + 150	- 40 to + 150	- 40 to + 200	- 40 to + 200	- 70 to + 180	- 40 to + 200	- 65 to + 175
-	-	0,21	0,21	-	-	-	-	-	-
-	-	> 20	> 20	> 20	-	-	-	-	-
-	-	2,6	2,82	2,8	-	-	-	-	-
-	-	1,0.10 ⁻⁴	1,0.10 ⁻⁴	5,0.10 ⁻³	-	-	-	-	-
-	-	> 1.10 ¹³	> 1.10 ¹³	-	-	-	-	-	-
36	36	36	36	36	36	36	18	18	18