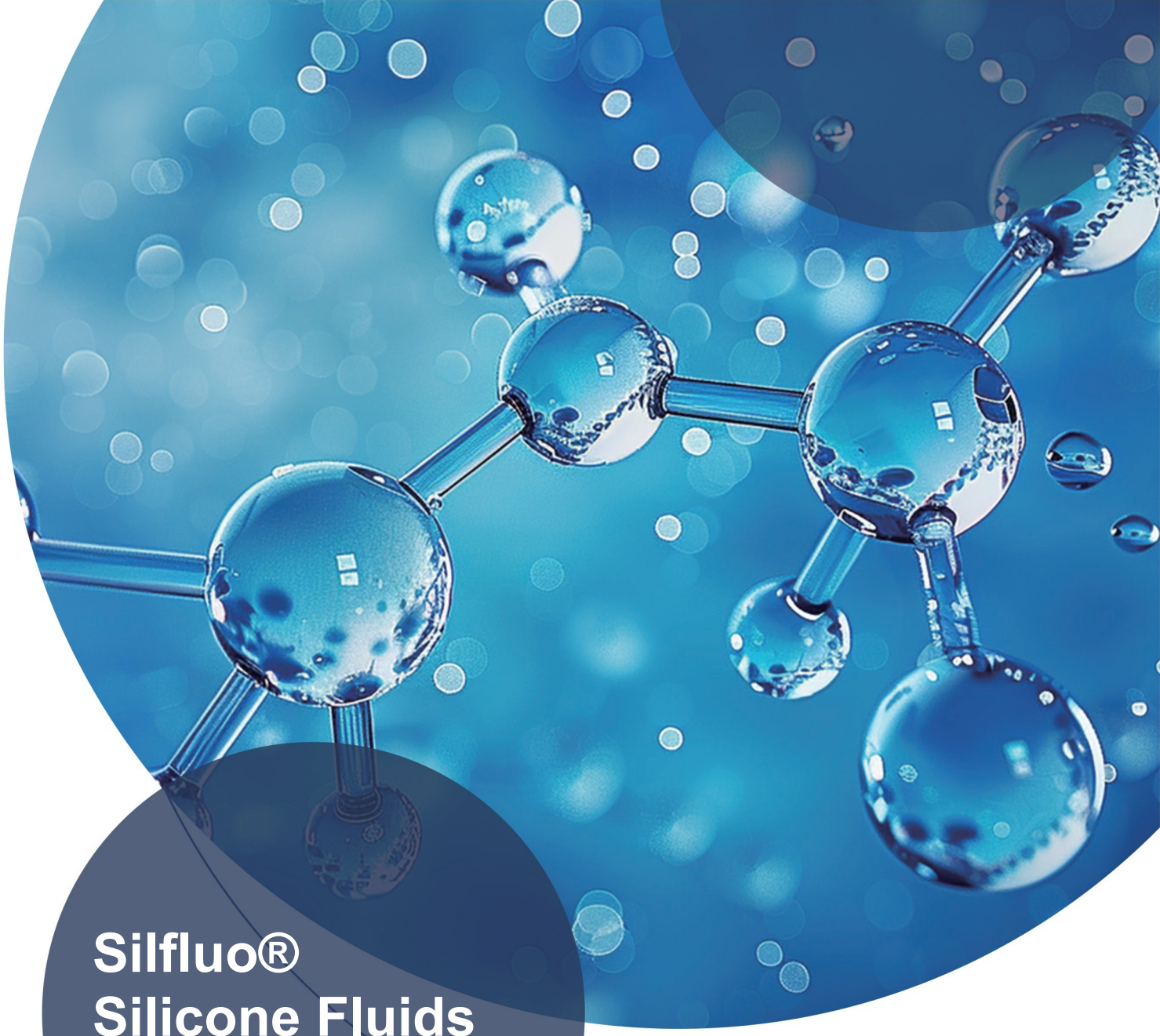


Silfluo®
Silicone Fluids

Product Range

Nanjing Silfluo New Material Co., Ltd.

Silfluo

www.silfluosilicone.com

MANAGEMENT SYSTEM

The Silfluo Quality Management Framework is not a stand-alone platform. It is embedded in the broader Silfluo Operating Discipline Framework, which brings together the policies, standards and workflows for environment, health, safety, manufacturing, human resources and quality. The quality management system is certified to ISO 9001.

With this integrated framework, Silfluo works to one cohesive system based on industry best practice.





SILFLUO QUALITY MANAGEMENT SYSTEM

The Silfluo Quality Management System, established and supported by company leadership, ensures that customers receive dependable products and services and that their needs and expectations are met. It requires strict compliance with technical specifications, regulatory standards and quality benchmarks.

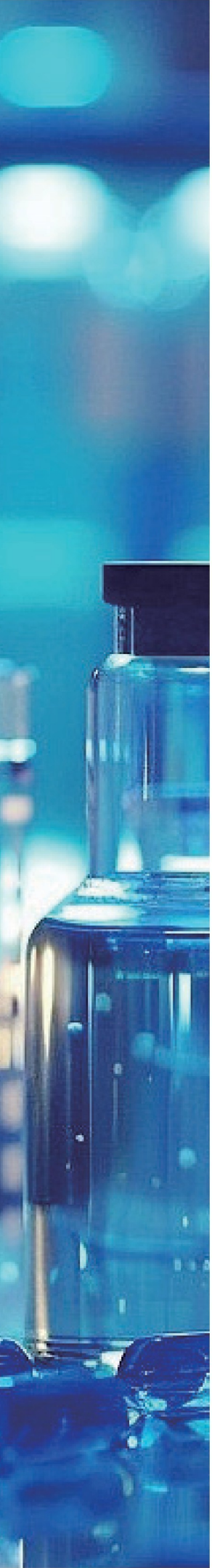
Product quality is upheld through standardization and precise process control. Service quality covers all customer interactions and is overseen by the responsible functional area. The quality attributes of both products and services are defined and agreed upon by Silfluo and its customers.



QUALITY PERFORMANCE STATEMENT

Excellence in quality is a shared responsibility and a core value for every Silfluo team member. It is achieved through collaboration, dedication and a commitment to continuous improvement.

We are committed to delivering products and services that meet or exceed customer expectations. Quality management ensures that we consistently deliver the products and services our customers trust.



QUALITY MEASUREMENT SYSTEMS

Silfluo uses QDG (Quality Data Gather) systems to track and evaluate progress in quality improvement. The QDG systems handle high-volume testing, so that every production batch is tested with validated methods.

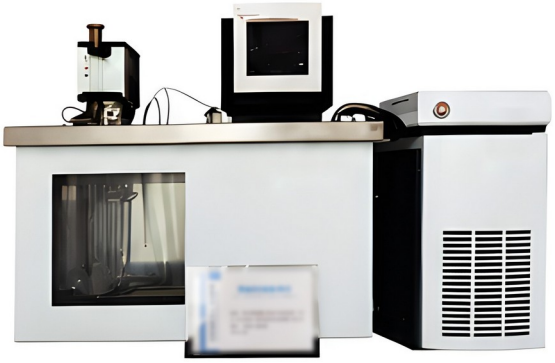
CONVENTIONAL TEST ITEMS	
Test item	**Equipment**
Viscosity	Rotational viscometer
Kinematic viscosity	Automated viscometer
Density	Density meter
Refractive index	Abbe refractometer
Hydroxyl value, amine value	Automatic titrator
Identification	FTIR spectrometer
Volatile content	Drying oven
Others	

SILICONE FLUID TESTING

Each batch is tested against its specification before release. Typical test items for silicone fluids are viscosity, density, refractive index, volatile content and functional-group content (Si–H, vinyl, hydroxyl, amine value).



Temperature-controlled rotational viscometer



Automated viscometer



Density meter



Abbe refractometer



FTIR spectrometer



Automatic titrator

SILICONE FLUIDS

Silicone fluids are linear polysiloxanes: a backbone of alternating silicon and oxygen atoms with organic groups on the silicon atoms. The Si–O backbone gives thermal and oxidative stability, low surface tension, a small change of viscosity with temperature and good dielectric properties. The side groups and end groups decide how a fluid is used.

Side groups and end groups

• Methyl groups: dimethyl silicone fluids (PDMS) for release, damping, lubrication, foam control and personal care.
• Phenyl groups: higher heat and radiation resistance, low-temperature fluidity and a higher refractive index.
• Trifluoropropyl groups: fluorosilicone fluids that resist fuels, oils and solvents.
• Reactive groups – vinyl, Si–H, silanol (Si–OH) and alkoxy: base polymers and crosslinkers for addition-cure and condensation-cure silicone rubber, sealants, gels and coatings.
• Organic groups – alkyl, polyether, epoxy, acrylate, amino and hydroxyalkyl: additives and reactive modifiers for coatings, polyurethanes, textiles and plastics.
• Emulsions: water-based forms of hydrogen, dimethyl and long-chain alkyl silicone fluids.

Key properties

• Thermal stability and high flash points (LF-201: flash point ≥ 310 °C)
• Flat viscosity–temperature profile; viscosity from 5 mPa·s (LF-211) to 500,000 mPa·s (LF-221)
• Low surface tension for spreading, release and foam control; water repellency; dielectric properties



LF-221 ultra-high viscosity fluid



LF-H101S side-H silicone fluid



LF-EH101 hydrogen silicone emulsion

SELECTION GUIDE

Silfluo silicone fluids in nine families. The product pages follow the same order.

Family	Structure	Silfluo grades	Typical uses
Dimethyl silicone fluids	Trimethylsilyl-terminated PDMS, non-reactive	LF-211, LF-201, LF-221	Release agents, antifoams, damping and dielectric fluids, lubricants, personal care
Alkoxy silicone fluids	Methoxy / alkoxy end groups, moisture curing	LF-TM107 / DM107, LF-M107, LF-MF10	Alkoxy-cure RTV sealants and adhesives, thermal interface materials, hydrophobic coatings
Phenyl silicone fluids	Phenylmethyl and diphenyl units; vinyl, Si –H and epoxy grades	LF-PM11, PM100, PM101, PM102, PM174, PM175, PM12, PM13, PME11, PH11, PH12, PV11	Heat-transfer and lubricating fluids, diffusion pump fluids, cosmetics, LED encapsulants, resin modification
Fluorosilicone fluids	Trifluoropropyl groups; methyl, vinyl, silanol, Si –H, amino, carbinol, perfluoroalkyl and polyether grades	LF-MF11, CMF11, VF11, HF11, CHF11, HF12, VHF13, AF11, CF11, PFH11, PEF11	Fuel- and solvent-resistant lubricants, non-aqueous antifoams, fluorosilicone rubber, water- and oil-repellent treatments
Vinyl silicone fluids	Vinyl end groups (both ends or one end)	LF-VPDMS, LF-VPDMS E-grade, LF-VMPDMS	Base polymers for addition-cure LSR, gels, potting compounds and release coatings
Silanol silicone fluids	Si–OH end groups (both ends or one end)	LF-OHP-L, OHP-H, OHPV, OHPM, OHP2, MOHP	Base polymers for condensation-cure RTV sealants; structure-control agents for silicone rubber
Hydrogen silicone fluids	Si–H groups: pendant, terminal or both	LF-H101H, H101L, H101S, H101T, H101TS; grades by termination on a page of their own	Crosslinkers and chain extenders for addition cure, hydrophobing agents, intermediates for modified silicones
Modified silicone fluids	Alkyl, epoxy, polyether, acrylate or hydroxyalkyl groups	LF-AM11 / AM12, EM102, PE101, PE102, ACM11, DPM12, CM12, CM14	Coating additives, PU foam stabilizers, reactive modifiers for PU, epoxy and UV-curable resins, release agents
Silicone emulsions	Water-based emulsions	LF-EH101, SE201, SE203	Mold release, textile water repellency, lubrication, coating additives

APPLICATIONS



Rubber, sealants and gels

Vinyl, hydrogen, silanol and alkoxy fluids as base polymers, crosslinkers and chain extenders for LSR, HTV, RTV and gels.



Electronics and LED

LED encapsulants (LF-PV11, PH11, PH12), potting compounds and dielectric gels, insulating fluids (LF-201, LF-PM11).



Personal care

Dimethicone grades LF-211, LF-201 and LF-221; phenyl fluids LF-PM12 and LF-PM13 for gloss and refractive index.



Textiles and leather

Water-repellent and finishing agents: LF-H101H, LF-EH101, LF-MF10, LF-SE201 and LF-PFH11.



Coatings, inks and resins

Leveling and flow additives (LF-PE101, LF-201); reactive modifiers for PU, epoxy and UV-curable resins (LF-CM12, LF-EM102, LF-ACM11).



Lubrication and heat transfer

Dimethyl, phenyl methyl and fluorosilicone fluids for lubricants, damping fluids, heat-transfer media and diffusion pumps.



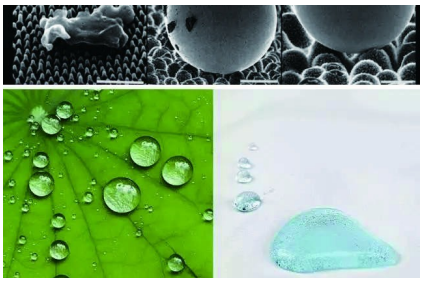
Release and foam control

Release agents (LF-201, LF-AM11, LF-EH101), antifoams (LF-201, LF-MF11), raw materials for antifoams and cutting fluids (LF-PE101).



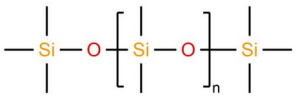
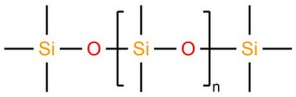
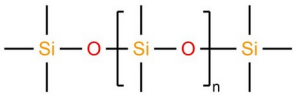
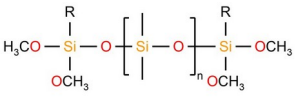
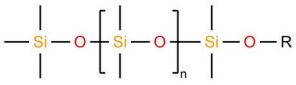
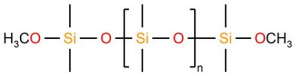
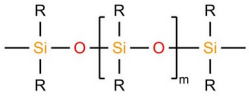
Automotive and car care

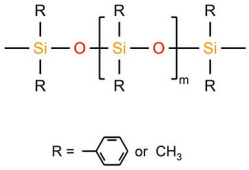
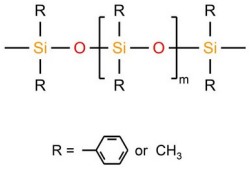
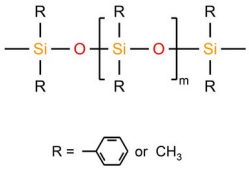
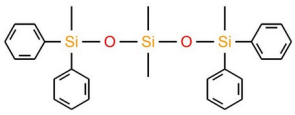
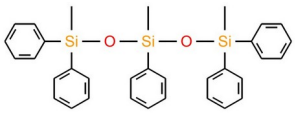
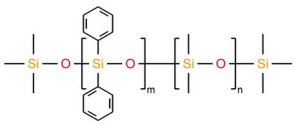
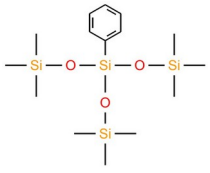
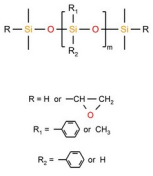
Polishes and waxes (LF-201, LF-211), damping fluids, fuel- and oil-resistant fluorosilicone lubricants (LF-MF11, LF-CMF11).

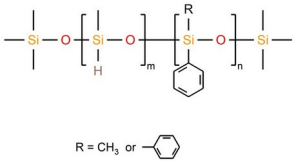
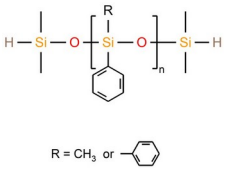
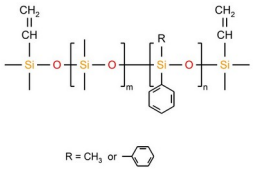


Water repellency

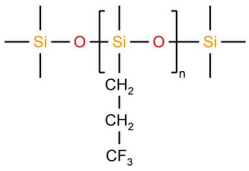
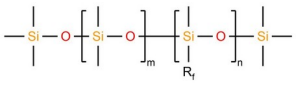
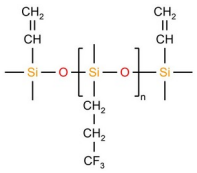
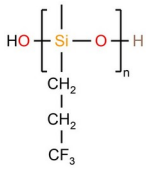
Hydrophobing of stone, concrete and powders (LF-PFH11, H101H, MF10); water- and oil-repellent treatments (LF-HF12, MF11).

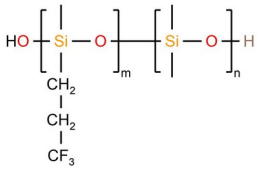
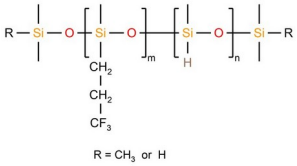
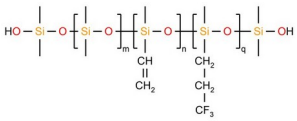
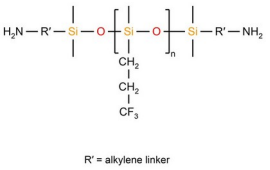
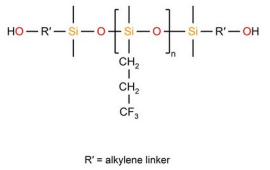
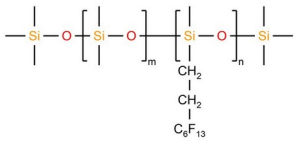
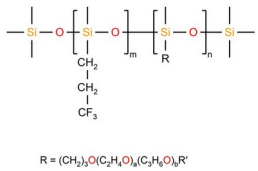
Code · Name · CAS	Description	Typical data (TDS)	Structure
DIMETHYL SILICONE FLUIDS			
LF-211 Low Viscosity Dimethyl Silicone Fluid CAS 63148-62-9	Low-viscosity PDMS in four grades (LF-211-5, -10, -20, -50) with low surface tension and fast spreading. Personal care carrier, penetrating lubricant, defoamer base, light damping.	Viscosity, 25 °C **5 / 10 / 20 / 50 mPa·s** Flash Point **≥115 to ≥270 °C** Refractive Index, 25 °C **1.3940–1.4040**	
LF-201 Dimethyl Silicone Fluid CAS 63148-62-9	PDMS in seven grades from 100 to 60,000 mPa·s. Release agents, antifoams, damping fluids, polishes, personal care and coating additives.	Viscosity, 25 °C **100–60,000 mPa·s** Flash Point **≥310 °C** Volatile, 150 °C / 2 h **≤1.00 %**	
LF-221 Ultra-High Viscosity Dimethyl Silicone Fluid CAS 63148-62-9	PDMS in two grades, 100,000 and 500,000 mPa·s. Viscous drives and heavy-duty damping, internal lubricant for thermoplastics, hair care, high-tack antifoam compounds.	Viscosity, 25 °C **100,000 / 500,000 mPa·s** Flash Point **≥330 °C** Volatile, 150 °C / 2 h **≤1.00 / ≤1.50 %**	
ALKOXY SILICONE FLUIDS			
LF-TM107 / DM107 Alkoxy-Terminated Silicone Fluid CAS 68037-58-1 (DM) 142982-20-5 (TM)	Methyl dimethoxy (DM) and trimethoxy (TM) capped PDMS: base polymers for alcohol-type (neutral) RTV-1 sealants and adhesives; methanol is the only cure by-product.	Viscosity DM107, 25 °C **1,000 / 10,000 / 35,000 mPa·s** Viscosity TM107, 25 °C **1,500 / 20,000 / 80,000 mPa·s**	 R = CH_3 (dimethoxy) or OCH_3 (trimethoxy)
LF-M107 Mono-Alkoxy Terminated Silicone Fluid	PDMS with one alkoxy end and one trimethylsilyl end. Filler treatment and dispersant for thermally conductive and conductive silicones; reactive diluent for low-modulus systems.	Viscosity, 25 °C **30 / 50 / 70 mPa·s** Grades **LF-M107-30, -50, -70**	 R = alkyl group
LF-MF10 Methoxy-Terminated Silicone Fluid CAS 68951-97-3	Methoxy-terminated PDMS of very low viscosity. Reactive diluent for alkoxy-cure RTV; moisture-curing water-repellent coatings and conformal coatings.	Viscosity, 25 °C **3 mPa·s** Appearance **Yellowish transparent liquid**	
PHENYL SILICONE FLUIDS			
LF-PM11 Series Phenyl Methyl Silicone Fluids	LF-PM11 and six grades LF-PM11-75 to -2000. Insulating fluids, high-temperature lubricants and greases, heat transfer, damping, plastics and cosmetic additives. Comparable to: LF-PM11: Dow DC-510, Shin-Etsu KF-50; LF-PM11-75 to -2000: Dow DC-550, WACKER AP-100	Viscosity, 25 °C **25–40 to 1500–2500 cSt** Refractive Index, 25 °C **1.47–1.48 / 1.49–1.51** Flash Point **≥240 to ≥300 °C**	 R = or CH_3

Code · Name · CAS	Description	Typical data (TDS)	Structure
LF-PM100 Phenyl Methyl Silicone Fluid	Phenyl methyl fluid for low-temperature greases and plastic-bearing lubricants, hydraulic fluids and instrument damping.	Viscosity, 25 °C **50–100,000 cSt** Freezing Point **≤−57 °C** Refractive Index, 25 °C **1.42–1.43**	
LF-PM101 Phenyl Methyl Silicone Fluid	High-phenyl methyl fluid for lubricant, heat-transfer and damping formulations; operating temperatures up to 350 °C.	Viscosity, 25 °C **500–20,000 cSt** Refractive Index, 25 °C **1.53–1.54** Flash Point **≥300 °C**	
LF-PM102 Phenyl Methyl Silicone Fluid	Medium-to-low-phenyl methyl fluid for lubricant, heat-transfer and damping formulations; operating temperatures up to 350 °C.	Viscosity, 25 °C **100–20,000 cSt** Refractive Index, 25 °C **1.46–1.48** Flash Point **≥280 °C**	
LF-PM174 Silicone Diffusion Pump Fluid	Working fluid for high-vacuum diffusion pumps: vacuum coating, high-vacuum smelting, electron-tube production, electron microscopy.	Viscosity, 25 °C **36–40 cSt** Ultimate Vacuum **≤3.1 × 10^{-7} Torr** Refractive Index, 25 °C **1.55–1.56**	
LF-PM175 Silicone Diffusion Pump Fluid	Working fluid for high-vacuum diffusion pumps: vacuum coating, high-vacuum smelting, electron-tube production, electron microscopy.	Viscosity, 25 °C **165–185 cSt** Ultimate Vacuum **≤3.1 × 10^{-9} Torr** Refractive Index, 25 °C **1.5765–1.5785**	
LF-PM12 Diphenyl Silicone Fluid CAS 68083-14-7	Trimethylsilyl-terminated diphenyl–dimethyl copolymer in three grades (LF-PM12A, B, D) by diphenyl content. Phenyl dimethicone for cosmetics, high-RI blending in LED encapsulants, high-temperature fluids.	Viscosity, 25 °C **50–3000 / 150–250 / 400–500 mPa·s** Refractive Index, 25 °C **1.4200–1.5100** Continuous Service **to 250–300 °C**	
LF-PM13 Phenyl Siloxane CAS 2116-84-9	Triphenyl(trimethylsilyloxy)siloxane oligomer, non-reactive: high refractive index at low viscosity. Cosmetics, optical matching and LED encapsulant blending, dielectric fluids.	Viscosity, 25 °C **15 mPa·s** Refractive Index, 25 °C **1.498** D4 / D5 / D6 **<0.1 %**	
LF-PME11 Epoxy-Functional Phenyl Methyl Silicone Fluid	Epoxy-functional phenyl methyl fluid: reactive modifier for epoxy resins and for polyurethane and polycarbonate systems.	Epoxy Equivalent Weight **260–340 g/eq** Viscosity, 25 °C **30–50 cSt** Refractive Index, 25 °C **1.50–1.51**	

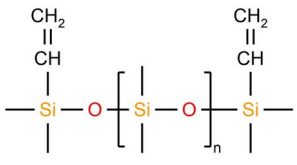
Code · Name · CAS	Description	Typical data (TDS)	Structure
LF-PH11 Phenyl Hydrogen Silicone Fluid	Phenyl Si–H fluids LF-PH11-50 (higher refractive index) and LF-PH11-43 (higher hydrogen content) for addition-cure LED encapsulant, insulation and resin formulations.	Viscosity, 25 °C **50–150 mPa·s** Hydrogen Content **0.55–0.65 / 0.70–0.80 wt%** Refractive Index, 25 °C **1.50–1.53 / 1.43–1.44**	
LF-PH12 Hydride-Terminated Phenyl Silicone Fluid	LF-PH12-55 with terminal Si–H groups: high-refractive-index Si–H component for LED encapsulant, insulation and resin formulations.	Viscosity, 25 °C **50–150 mPa·s** Hydrogen Content **0.3–0.35 wt%** Refractive Index, 25 °C **1.54–1.55**	
LF-PV11 Phenyl Vinyl Silicone Fluid	Vinyl phenyl fluids LF-PV11-43 (higher viscosity, lower vinyl) and LF-PV11-53 (higher vinyl, higher refractive index) for addition-cure LED encapsulants and insulation.	Viscosity, 25 °C **5000–8000 / 20–100 mPa·s** Vinyl Content **0.06–0.10 / 8–9 wt%** Refractive Index, 25 °C **1.43–1.44 / 1.53–1.54**	

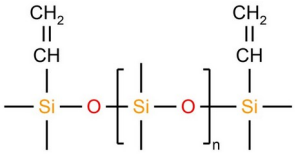
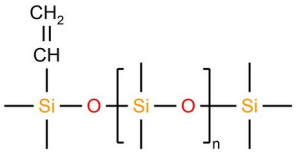
FLUOROSILICONE FLUIDS

LF-MF11 Methyl-Terminated Fluorosilicone Fluid CAS 63148-56-1	Trimethylsiloxy-terminated fluorosilicone fluids in four grades (LF-MF11-LT, -MT, -MF, -HQ), about −60 to +200 °C. Non-aqueous antifoams, fuel- and solvent-resistant lubricants, damping fluids, release agents.	Viscosity, 25 °C **30–20,000 cSt** Refractive Index, 25 °C **1.380–1.400** Density, 25 °C **1.00–1.30 g/cm³**	
LF-CMF11 Methyl Fluorosilicone Copolymer Fluid CAS 115361-68-7	Methyl fluorosilicone copolymer fluid for high-speed bearings in chemical media and for parts exposed to fuels, oils and solvents.	Viscosity **Customizable, set in the agreed specification** Appearance **Colorless to pale yellow liquid**	
LF-VF11 Vinyl-Functional Fluorosilicone Fluid CAS 68951-98-4	Vinyl fluorosilicone fluids with terminal or terminal/pendant vinyl groups: base fluid for addition-cure fluorosilicone rubber, adhesives, potting and low-RI optical adhesives.	Viscosity, 25 °C **50–50,000 cSt** Trifluoropropyl Content **10 / 30 / 50 / 80 wt% (LT / MT / MF / HQ)** Refractive Index, 25 °C **1.380–1.400**	
LF-HF11 Silanol-Terminated Fluorosilicone Fluid CAS 68607-77-2	Silanol-terminated fluorosilicone fluids: structure-control agents for fluorosilicone rubber (low-molecular-weight grades), base fluids for condensation-cure RTV fluorosilicone (1,000 and 5,000 cSt).	OH Content **3.5–6.0 / ≥8.0 wt%** Viscosity, 25 °C **40–60, 60–100, 1,000, 5,000 cSt** Flash Point **>240 °C**	

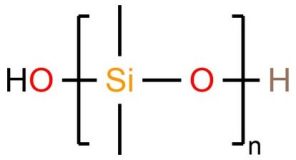
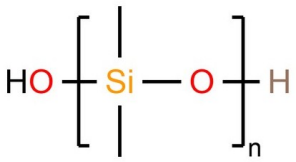
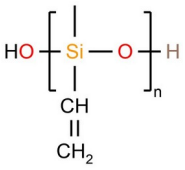
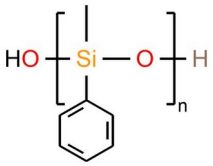
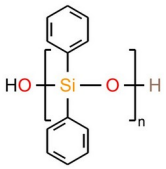
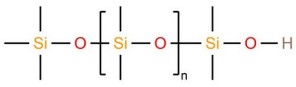
Code · Name · CAS	Description	Typical data (TDS)	Structure
LF-CHF11 Hydroxyl Fluorosilicone Copolymer Fluid	Intermediate and processing aid for fluorosilicone rubber; raw material for repellents, defoamers, lubricants and textile auxiliaries.	Viscosity **50–50,000 mPa·s** Specification **Varies with fluorine content**	
LF-HF12 Hydrogen-Functional Fluorosilicone Fluid CAS 67923-24-4 (M, TS) 1988741-30-5 (T03)	Si–H fluorosilicone crosslinkers in five grades (pendant, terminal and pendant, or terminal Si–H) for addition-cure fluorosilicone rubber, gels, adhesives and release coatings.	Si–H Content **0.03–0.80 wt%** Viscosity, 25 °C **20–100 / 200 cSt** Refractive Index, 25 °C **1.380–1.400**	
LF-VHF13 Silanol- and Vinyl-Functional Fluorosilicone Fluid	Fluorosilicone fluid with silanol and vinyl groups (LF-VHF13-MF50): structure-control agent for fluorosilicone and silicone rubber.	Viscosity, 25 °C **30–100 cSt** Vinyl Content **5 wt%** OH Content **3–8 wt%**	
LF-AF11 Amino-Functional Fluorosilicone Fluid	Amino groups react with isocyanates: reactive fluorosilicone modifier for polyurethane coatings, inks, elastomers and plastics.	Viscosity, 25 °C **200–3,000 mPa·s** Amine Value **0.1–0.4 mmol/g** Refractive Index, 25 °C **1.3800 ± 0.01**	
LF-CF11 Carbinol-Functional Fluorosilicone Fluid	Carbinol (C–OH) groups react with isocyanates: reactive fluorosilicone modifier for polyurethane coatings, inks, elastomers and resins. Values pending confirmation.	Viscosity, 25 °C **1500–2000 cSt** Hydroxyl Value **22–32 mg KOH/g** Density, 25 °C **1.28 g/cm³**	
LF-PFH11 Perfluorohexyl Silicone Fluid	Water- and oil-repellent treatments for absorbent stone and concrete; textile finishing auxiliaries.	Specification **Varies with fluorine content**	
LF-PEF11 Polyether-Modified Fluorosiloxane	Wetting, dispersing and leveling additive for coatings; self-emulsifying defoamers for aqueous systems and solvent-based defoamers.	Viscosity **100–5,000 mPa·s** Appearance **Colorless or slightly yellow liquid**	

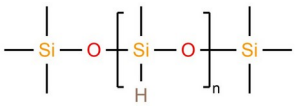
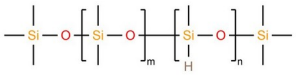
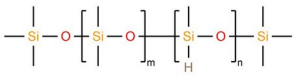
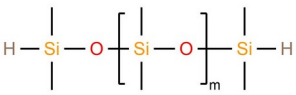
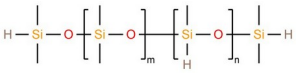
VINYL SILICONE FLUIDS

LF-VPDMS Vinyl Silicone Fluid (Divinyl-terminated) CAS 68083-19-2	Vinyl-terminated PDMS, the base polymer for platinum-catalyzed addition cure: LSR and HTV, potting compounds, LED encapsulants, release coatings. Custom grade LF-VPDMS-X on request.	Viscosity, 25 °C **100–100,000 mPa·s** Vinyl Content **0.16–2.86 mol%** Volatile, 150 °C / 3 h **≤1.00 %**	

Code · Name · CAS	Description	Typical data (TDS)	Structure
LF-VPDMS E-grade Electronic-Grade Vinyl-Terminated Polydimethylsiloxane CAS 68083-19-2	The LF-VPDMS grades purified for electronics (alkali ions, trimethylamine, hydroxyl groups and cyclics reduced). Semiconductor packaging, optical fiber coatings, avionics potting, LED encapsulants.	Cyclics D3–D10, three tiers **<500 / <300 / <100 ppm** Viscosity, 25 °C **100–100,000 mPa·s**	
LF-VMPDMS Mono-Vinyl Terminated Silicone Fluid CAS 68952-00-1	One vinyl end and one trimethylsilyl end: reactive softener that lowers hardness without oil bleed in thermal interface materials, gels, skin-safe and mold-making silicones.	Viscosity, 25 °C **100 / 350 / 2,000 / 20,000 mPa·s** Vinyl Content **0.05–0.52 mol%** Volatile, 150 °C / 3 h **≤1.00 %**	

SILANOL (HYDROXYL) SILICONE FLUIDS

LF-OHP-L Low-Medium Viscosity Silanol-Terminated PDMS CAS 70131-67-8	107 silicone base (OH polymer), the base polymer for condensation-cure RTV: construction sealants, electronics potting, FIP gaskets, textile coatings, mold rubber.	Viscosity, 25 °C **Several tens to several tens of thousands cSt** Relative Density **0.97**	
LF-OHP-H High Viscosity Silanol-Terminated PDMS CAS 63148-60-7	High-viscosity OH polymer (107 silicone rubber), the base polymer for condensation-cure RTV silicone rubbers and sealants.	Viscosity, 25 °C **High, grade-dependent (contact us)** Relative Density **0.97**	
LF-OHPV Vinyl Hydroxy Silicone Fluid CAS 67923-19-7	Silanol ends and pendant vinyl groups: structure-control agent against crepe hardening in LSR and HTV, reactive plasticizer, filler treatment.	Viscosity, 25 °C **35 mPa·s** Hydroxyl Content **9.0 wt%** Vinyl Content **1.0 / 2.5 / 11.5 wt%**	
LF-OHPM Phenyl Methyl Hydroxy Silicone Fluid CAS 80801-30-5	Silanol-terminated polymethylphenylsiloxane: high-RI reactive base for optical and LED encapsulants, resin modifier, RTV sealants for extreme environments.	Viscosity, 25 °C **500–20,000 mPa·s** Refractive Index, 25 °C **1.430–1.500** Density, 25 °C **0.98 g/cm³**	
LF-OHP2 Diphenyl Hydroxy Silicone Fluid CAS 63148-59-4	Silanol-terminated diphenylsiloxane: high-RI base polymer for LED encapsulants, high-temperature RTV sealants, radiation-resistant potting and block copolymers.	Viscosity, 25 °C **≥1000 mPa·s** Refractive Index, 25 °C **1.50–1.54** Density, 25 °C **0.98 g/cm³**	
LF-MOHP Monohydroxyl-Terminated Silicone Fluid	Dimethyl fluid with one terminal hydroxyl group: modifier for vinyl polymers (surface smoothness, structure control, water resistance, anti-blocking).	Viscosity, 25 °C **100–1000 (±5 %)** Volatile, 150 °C / 3 h **≤1 %**	

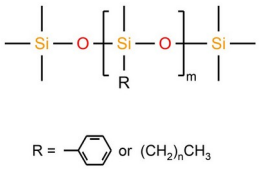
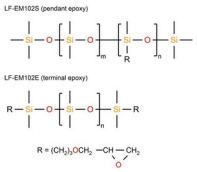
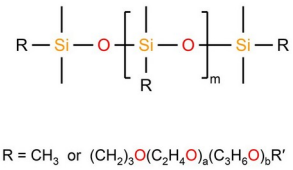
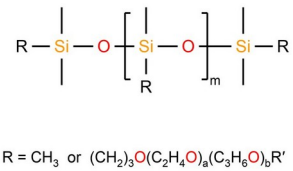
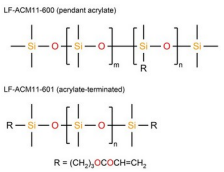
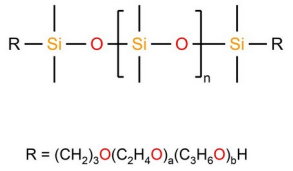
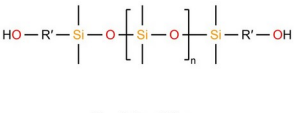
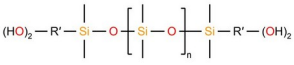
Code · Name · CAS	Description	Typical data (TDS)	Structure
HYDROGEN SILICONE FLUIDS			
LF-H101H High Hydrogen Silicone Fluid CAS 63148-57-2	100 % active PMHS with pendant Si–H: crosslinker for addition cure, intermediate for modified silicones, hydrophobing agent, anti-caking of dry powders, textile finishing.	Hydrogen Content **≥1.5 wt%** Viscosity, 25 °C **15–50 mPa·s** Refractive Index, 25 °C **1.3900–1.4000**	
LF-H101L Low Hydrogen Silicone Fluid CAS 68037-59-2	Methylhydrogen–dimethylsiloxane copolymer: crosslinker for softer addition-cure networks, intermediate for modified silicones, hydrophobing agent.	Viscosity, 25 °C **10–1000 mPa·s** Hydrogen Content **0.1–1.5 wt%, customizable**	
LF-H101S Side-H Silicone Fluid CAS 68037-59-2	Methyl-terminated copolymer with pendant Si –H only: backbone for comb-type modified silicones and PU foam stabilizer intermediates; crosslinker for LSR and gels.	Viscosity, 25 °C **10–1000 mPa·s** Hydrogen Content **0.03–1.2 wt%** Volatiles **≤1.5 %**	
LF-H101T Terminal-H (Hydride-Terminated) Silicone Fluid CAS 70900-21-9	Hydride-terminated PDMS: chain extender in LSR, silicone B-block for ABA copolymers, backbone for end-functional silicones.	Viscosity, 25 °C **40–900 mPa·s** Hydrogen Content **0.009–0.80 wt%** Volatiles **≤5.0 %**	
LF-H101TS Terminal and Side-H Silicone Fluid CAS 69013-23-6	Si–H at both chain ends and along the chain: crosslinker for LSR, release coatings, silicone PSA and foam. LF-H101 grades by termination: see the next page.	Viscosity, 25 °C **4–8 / 90–120 mPa·s** Hydrogen Content **1 / 0.28 wt%** Grades **LF-H101TS-5, -100**	

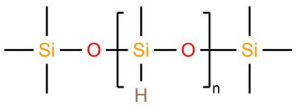
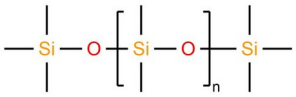
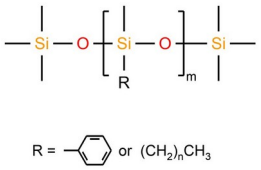
HYDROGEN SILICONE FLUIDS BY TERMINATION

The position of the Si–H groups decides how a hydrogen silicone fluid reacts: pendant Si–H groups crosslink, terminal Si–H groups extend the chain, and grades with both do both. High-hydrogen, low-hydrogen, pendant and hydride-terminated are overlapping names; the table lists the grades by termination type with Si–H content (active hydrogen), viscosity and volatile content.

Termination	Code	Viscosity, 25 °C cSt	Si–H content %	Volatile content 150 °C / 3 h, %
Side-H (pendant)	LF-H101-H46	2~4	0.45~0.50	—
	LF-H101-H65	10~15	0.50~0.70	≤10 (120 °C / 2 h)
	LF-H101-H12	10~20	0.11~0.13	≤8
	LF-H101-H536	10~20	0.35~0.37	≤10
	LF-H101-H510	10~20	0.95~1.05	≤5
	LF-H101-H95	20~25	0.18~0.22	≤5
	LF-H101-H57	30~40	0.13~0.14	≤5
	LF-H101-H308	35~45	0.11~0.13	≤5
	LF-H101-H512	55~65	1.15~1.25	≤1
	LF-H101-H8	50~70	0.05~0.07	≤5
	LF-H101-H503	50~70	0.53~0.57	≤1
	LF-H101-H33	60~80	0.17~0.19	≤5
	LF-H101-H36	60~100	0.35~0.40	≤1
	LF-H101-H502	70~110	0.75~0.79	≤1
	LF-H101-H23	80~100	0.40~0.44	≤2
	LF-H101-H35	90~130	0.11~0.13	≤5
	LF-H101-H86	80~100	0.08~0.1	≤2
	LF-H101-H3	90~110	0.27~0.29	≤5
	LF-H101-H138	90~130	0.170~0.190	≤11 (105 °C / 1 h)
	LF-H101-H802	100~120	0.77~0.88	≤1
Hydride-terminated (both ends)	LF-H101-H900	5~10	0.20~0.22	≤30 (120 °C / 2 h)
	LF-H101-H518	8~12	0.17~0.19	—
	LF-H101-H45	17~22	0.11~0.13	≤5
	LF-H101-H6	20~25	0.1~0.12	≤5
	LF-H101-DH07	30~50	0.06~0.08	≤1.5
	LF-H101-DH04	60~70	0.04~0.05	≤5
	LF-H101-DH58	50~60	0.050~0.055	<1 (105 °C / 3 h)
	LF-H101-DH37	80~100	0.035~0.04	≤5
	LF-H101-DH02	400~1000	0.01~0.015	<5
Pendant and hydride-terminated	LF-H101-LHC-2	70~90	0.77~0.81	≤1
	LF-H101-LHC-3	30~40	0.78~0.82	≤2
	LF-H101-LHC-7	30~40	0.22~0.28	≤3
	LF-H101-LHC-16	40~55	0.12~0.14	≤1
Mono-hydride-terminated	LF-H101-H222-6	2~4	0.18~0.22	—
	LF-H101-H222-4	10~20	0.08~0.12	<20
	LF-H101-H222-5	20~30	0.03~0.07	<10
	LF-H101-H222	40~60	0.025~0.045	<5
	LF-H101-H222-10	60~80	0.02~0.035	1.50
	LF-H101-H222-3	80~100	0.01~0.03	<3

Si–H content = active hydrogen content. Volatile content at 150 °C / 3 h unless another condition is given; — = not specified. Other viscosities and Si–H contents on request.

Code · Name · CAS	Description	Typical data (TDS)	Structure
MODIFIED SILICONE FLUIDS			
LF-AM11 / AM12 Alkyl and Alkyl Aryl Silicone Fluids	Long-chain alkyl (LF-AM11) and alkyl aryl (LF-AM12) modified fluids: release agents for parts to be painted or printed, coating slip additives, lubricants. Comparable to: Dow OFX-0203	Viscosity, 25 °C **500–1500 / 1000–4000 cSt** Solids Content **≥99 %**	
LF-EM102 Epoxy-Modified Silicone Fluid	Pendant (LF-EM102S) or terminal (LF-EM102E) epoxy groups: reactive modifier for epoxy coatings and adhesives, potting, composites, UV-curable coatings, textile treatment.	Viscosity, pendant grades **100–10,000 mPa·s** Viscosity, terminal grades **50–1500 mPa·s** Volatile, 120 °C / 3 h **≤1 %**	
LF-PE101 Series Polyether-Modified Silicone Fluids	Water-soluble polyether silicones (LF-PE101-20, -50): textile softening, anti-drip films, coating leveling, PU foam control, cutting fluid and antifoam raw materials.	Viscosity, 25 °C **1200–1500 / 4500–6000 cSt** Active Content **100 %**	
LF-PE102 Silicone Polyether Surfactant for Rigid PU Foam	Silicone polyether surfactant (Si–C-linked, non-hydrolyzable polyether silicone fluid): foam stabilizer for rigid PU insulation and packaging foam.	Viscosity, 25 °C **600–1000 cSt** Active Content **100 %**	
LF-ACM11 Series Acrylate-Modified Silicone Fluids	Pendant acrylate (LF-ACM11-600) and acrylate-terminated (LF-ACM11-601) silicones: flow and surface additive for radiation-curable coatings, UV-curable resin modification.	Molecular Weight **2000–20,000 / 100–50,000 g/mol**	
LF-DPM12 Series Hydroxyl-Terminated Polyether-Modified Silicone Fluids	Hydroxyl-terminated polyether silicones for resin modification and coating leveling. From LF-DPM12A to -F, resin compatibility decreases and softness increases.	Molecular Weight **2000–2600 g/mol**	
LF-CM12 Series Hydroxyalkyl-Terminated Silicone Fluids	Silicone diols with hydroxyalkyl ends for polyurethane, polyester and coating resin modification; easy-clean and anti-blocking coatings. Comparable to: Shin-Etsu KF-6001 / KF-6002, Evonik TEGO-5000 / TEGO-5001	Molecular Weight **1300 / 2000 / 4000 g/mol** Hydroxyl Value **80 / 56 / 28 mg KOH/g** Viscosity, 25 °C **37 / 58 / 105 cSt**	
LF-CM14 Tetrahydroxyalkyl-Functional Silicone Fluid	Tetrahydroxyalkyl-functional silicone for hydroxyl-reactive resins: water-repellent and easy-clean coatings.	Molecular Weight **2000–2200 g/mol** Hydroxyl Value **112 mg KOH/g** Viscosity, 25 °C **260 cSt**	

Code · Name · CAS	Description	Typical data (TDS)	Structure
SILICONE EMULSIONS			
LF-EH101 Methyl Hydrogen Polysiloxane Emulsion	Aqueous PMHS emulsion: mold release, textile water repellency (with hydroxyl silicone emulsion), hydrophobing of construction and industrial materials.	Solid Content **30 ± 2 %** pH **3–5**	
LF-SE201 Silicone Emulsion	Nonionic silicone emulsion: release agent for rubber, plastics and latex; softness and slip in textile and leather finishing; industrial lubrication. Comparable to: Dow MEM-0349	Solids Content **30–60 %** pH **6–9**	
LF-SE203 Long-Chain Alkyl (Aryl) Silicone Emulsion	Long-chain alkyl (aryl) silicone emulsion: release agent for parts to be painted or printed, coating slip and water repellency, lubrication. Comparable to: Dow MEM-5009	Active Content **30 or 60 %** pH **6–8**	

TO SELECT A GRADE, PLEASE TELL US

01 The application and the system the fluid goes into, for example addition-cure or condensation-cure silicone, a solvent-based or an aqueous formulation.

02 The viscosity range and, where needed, the functional group and its content: vinyl, Si–H, silanol, alkoxy, amino, epoxy, polyether and others.

03 Special requirements such as refractive index, purity (cyclic siloxanes, ions), service temperature or regulatory needs.

04 Packaging, sample size and annual quantity.

Samples, TDS, SDS and COA are available on request. Viscosity and functional-group content of many grades can be customized.

PACKAGING AND STORAGE

Packaging

Pails and drums from 5 kg to 200 kg (plastic, steel or plastic-lined steel) and IBCs of 950–1000 kg. The packaging of each grade is given in its TDS.

Storage and shelf life

Store in the original, unopened containers in a cool, dry and ventilated place, away from direct sunlight, heat and ignition sources. Keep away from strong oxidizing agents, acids and alkalis. Shelf life is 6 to 36 months from the date of production, depending on the grade.

Hydrogen silicone fluids

Si–H materials may release hydrogen in contact with moisture, alcohols, acids, alkalis and metal catalysts. Avoid such contact during storage and ensure adequate ventilation during use.

Transport and documents

Transport classification: see the current SDS of each grade. Each delivery comes with a certificate of analysis (COA); TDS and SDS are available on request.



Pail



Drum



IBC



CONTACT US

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The data in this brochure are typical values, not specifications. Please conduct a trial before using a product to confirm that it is suitable for the intended use. The uses described do not guarantee freedom from conflict with any patent. Comparable grades are given for orientation only; trademarks are the property of their respective owners.