

POWSIL™-59211 PDMS Silicone Softener

INTRODUCTION

POWSIL™ 59211 is a 100% polydimethylsiloxane (PDMS) fluid with a nominal viscosity of 5,000 cSt, designed for textile softening and lubrication applications.

Its dimethylpolysiloxane structure provides excellent surface lubrication, low surface tension, and chemical stability. When properly emulsified, it delivers a smooth, silky and lubricated hand feel, improved fabric drape, and reduced surface friction.

POWSIL™ 59211 is commonly used as a base silicone softener or as a blending component in textile finishing formulations.

FEATURES & BENEFITS

- 100% polydimethylsiloxane
- Excellent lubricity
- Low surface tension
- High thermal and oxidation stability
- Very low volatility
- Nonionic and chemically inert
- Good compatibility with textile finishing auxiliaries

PHYSICAL PROPERTIES

CAS No.	63148-62-9
EINECS No.	613-156-5
Color and Appearance	Colorless transparent liquid
Specific Gravity (25°C)	0.975
Refractive Index (25°C)	1.403
Viscosity	5000 cSt
Flash Point	>300°C
Ignition Point	>400°C
Freezing Point	-50°C
Surface Tension	21.4mN/m

These values are typical and are not intended for use as specifications

APPLICATIONS

POWSIL™ 59211 is primarily used as a base silicone softener after emulsification. It is suitable for fabric softening of woven and knitted textiles,

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where it enhances surface smoothness, improves slip, and provides a smooth, silky hand feel. The product contributes to better fabric drape and reduced surface friction, making it appropriate for general-purpose or cost-sensitive soft finishing systems.

In addition, POWSIL™ 59211 is widely used for yarn and sewing thread lubrication. It improves processing performance by reducing friction and abrasion and helps enhance dry rubbing performance.

POWSIL™ 59211 may also be blended with amino silicone emulsions or other textile softeners to adjust smoothness, reduce tackiness, and optimize formulation balance depending on the desired handle characteristics.

PACKING

POWSIL™-59211 is supplied in 190Kg steel drum or 950Kg IBC tote.

STORAGE

In the original unopened packaging, POWSIL™-59211 fluid has a shelf life of 24 months when stored at ambient temperatures. The product does not freeze and there are no restrictions on storage.

HANDLING

This document does not contain the product safety information required for safe use. Before handling, please refer to the product and safety data sheets, as well as container labels, for information on safe usage, physical hazards, and health risks. Safety Data Sheet is available on the website, from the distributor, or by contacting SiSiB customer service.

NOTE

All information in the leaflet is based on our present knowledge and experience. We reserve the right to make any changes according to technological progress or further developments. Performance of the product described herein should be verified by testing.

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