

POWSIL™-59482

Self-Dispersed Silicone Softener

INTRODUCTION

POWSIL™-59482 is a new generation textile softener. It is a self-dispersed silicone fluid and developed to solve issues such as thermal migration, oil-spots, oiling/greasy feel & color change which are common problems for traditional amino-silicone. It imparts moderate hydrophilic to various fabric.

BENEFITS

- Self-dispersion silicone oil and can be readily diluted to any grades without oil-spots in processing;
- Provides super silky hand feel like macro-emulsions of amino-silicone, no oil-spots;
- Cost effective even at very low dosage (1-5g/l);
- Provides a high level of natural softness to synthetics and their blends with natural fibers;
- Provides moderate hydrophilic property to various fabric;
- Provides excellent fiber elasticity and shape recovery;
- Hindered amine function & slight or no yellowing;
- Excellent colour fastness to washing;
- Excellent stability under most finishing conditions, including jet/overflow;
- Can be used with anti-wrinkle (durable press) resins, catalysts and optionally OBA's;
- Re-dyeable & over dyeable;

TYPICAL PHYSICAL PROPERTIES

Appearance	Light yellowish transparent liquid
Viscosity (25°C, cps)	Max. 1500
pH (25°C)	4.0-6.0
Solid Content (%)	Max. 64.0

APPLICATION

POWSIL™-59482 can be as a softener and a slick enhancer which be used in textile fabric finishing or yarn finishing.

POWSIL™-59482 can be used as received or pre-diluted with water before applying. Optimum usages depend on the required softness of the different types of fabric and yarn.

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An example of a formulation & procedures of dilution of POWSIL™-59482

1. Formulation:

POWSIL™-59482:	30%
Water:	69.9%
Acetic acid (optional):	0.1%

2. Procedures:

- a. Charge all water and acetic acid (optional) into a mixing tank, and then start to stir 50-100 rpm for 5 min.
- b. Slowly Add POWSIL™-59482 into above mixing tank under stirring, continue to stir at 50-100 rpm for 30 min
- c. Stop stirring and stand for a while for foam reducing.
- d. Filter above emulsion and drum.
- e. A light milky emulsion is obtained.

Typical formulations for fishing fabric

1. Pad-dry-cure process

Dosage:	1-10g/l for light fabric or 10-20g/l of POWSIL™-59482 as received for heavy fabric
pH:	5.0-7.0
Temp.:	Ambient temperature
Dry/Cure:	120-170 °C for 1-3min

2. Exhaustion process

Dosage:	0.2-1.0% (o.w.f.) on light fabric & 1.0-2.0% on heavy fabric
Liquor ratio:	1/10-1/20
pH:	5.0-7.0
Temp.:	Ambient temperature
Time:	10-30 min
Spinning & Drying:	100-170 °C for 1-3 min

3. Garment washing process

Dosage:	1.0-3.0% on the weight of garment
Temp.:	Ambient temperature
Time:	30-60 min
Spinning & Drying:	100-130 °C for 3-5 min

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Guides of Stripping:

POWSIL™-59482 can be stripped off fabric.

The stripping formulation is as follows:

Na₂CO₃: 5g/L

Detergent: 2-5%

Add water and Na₂CO₃ and detergent onto fabric tank and then heat to 100°C for 60 min. Then rinse fabric with acidic water and water.

PACKING AND STORAGE

To ensure that the product quality is maintained, the container should be tightly sealed when not in use. It should be stored at normal room temperature, preventing prolonged exposure to extreme heat and cold conditions, which may cause product separation. POWSIL™-59482 tends to be sediment on bottom during storage period. If the product is separated, stir the contents to homogeneous. If the product is frozen, thaw it at warm condition and stir after thawed

NOTES

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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Please send all technical questions concerning quality and product safety to: support@SiSiB.com.