

POWSIL™-59220

Hydrophilic Silicone Softener

INTRODUCTION

POWSIL-59220 is an innovative textile softener, especially designed to deliver a hydrophilic, voluminous and silky natural hand feel to most types of fabrics at lower use level than traditional silicone softeners. It provides fast & consistent hydrophilicity and high ability of fabric to rapidly absorb & retain liquid water of water absorption to most types of textile fiber or fabric, especially for terry towel, which cannot be obtained with traditional silicone or fatty acid based softeners. It is very stable in ordinary textile finish process without causing oil-spots on fabric.

BENEFITS

- Provides fast & consistent water absorption on various fabric, especially suitable for terry towel;
- Provides high ability to retain liquid water on fabric, especially for terry towel fabric;
- Imparts soft, bulky & smooth hand feel;
- Deeply penetrate into fibers and impart softness & bulkiness;
- Excellent affinity with all types of textile;
- Excellent fiber elasticity and shape recovery;
- Durable softness to laundering;
- Less fabric yellowing;
- Outstandingly exhaustible to particularly natural fibers;
- Re-dyeable & over dyeable;
- Readily diluted to any grades without additional emulsifiers;
- Very stable & non-oil-spots if used in ordinary textile finish process;

TYPICAL PHYSICAL PROPERTIES

Property	Value
Physical Form	Liquid state
Appearance	Clear, pale & yellowish
Solid Contents (wt%)	55.0-58.0
Viscosity (25°C, cps)	<1000
pH (25°C)	4.0-6.0
Flash Point(°C, Open)	>100
Diluents	Water
Gravity(25°C)	0.993
Ionic	Slightly cationic

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APPLICATION

POWSIL-59223 can be readily diluted with water into any grades without additional emulsifying process.

Micro-emulsion for 30.0% of POWSIL-59223

1) Formulation:

POWSIL-59223:	30%
Water:	70%

2) Procedures:

- 1) Charge water into a tank and start to stir;
- 2) Add POWSIL-59223 gradually under stirring;
- 3) Continue to stir for 5-10 min after all addition;
- 4) Clear micro-emulsion will be obtained at end of this procedure.

POWSIL-59223 can be used as received or pre-diluted with water before applying.

Optimum treatments are dependent on the required softness of the fabric and yarn after dyeing and finishing.

1. Pad-dry-cure process

Dosage:	10~20g/L for light fabric or 25-50g/L for heavy fabric
pH:	5.0 ~ 7.0
Temp.:	Ambient temperature
Dry/Cure:	120-170 °C for 1-3min

2. Exhaustion process

Dosage:	1.0-2.0% (o.w.f.) on light fabric & 2.5-5.0% on heavy fabric like terry towel
Liquor ratio:	1/10-1/20
pH:	5.0 -7.0
Temp.:	Ambient temperature

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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

Stripping:

POWSIL-59223 can be stripped off fabric. The stripping formulation is as follows:

NaOH: 5g/L
LABS (30%): 2-5%

Add water and NaOH 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-59223 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.