

POWSIL™-59256

Hydrophilic Silicone Softener

INTRODUCTION

POWSIL-59256 is an amino and polyether silicone terpolymer that delivers consistent hydrophilicity to all textile fibers and fabrics. It provides a soft, slick hand feel and remains stable in standard textile finishing processes without causing oil spots. It ensures instant and consistent water absorption across various fabrics.

BENEFITS

- Provides instant & consistent water absorption on various fibers & fabric;
- Less yellowing as low amine content;
- Imparts soft & smooth hand feel;
- No extra emulsifiers included but self-dispersed in water and alcohols;
- Can be diluted with water to any grade without additional emulsifies;
- Very stable & non-oil-spots if used in ordinary textile finish process;
- Excellent affinity with all types of textile;
- Excellent fiber elasticity and shape recovery;
- Durable softness to laundering if catalyst is used;
- Doesn't interfere with the soil release properties of fabrics treated with fluorocarbon;
- Redyeable & over dyeable.

TYPICAL PHYSICAL PROPERTIES

Property	Value
Physical Form	Liquid sate
Appearance	Light yellowish & transparent
Active Contents (wt%)	~100%
Amine Value (mmol/g)	0.14
Viscosity (25°C, cSt)	Max. 20,000
Flash Point (°C, open)	Min.80
Cloud Point (°C, 1%aq)	~63
Diluents	Water, alcohol
10% of POWSIL-59256 in aq.	Clear
Ionic	Nonionic

APPLICATION

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POWSIL-59256 can be directly used as received or can be pre-diluted with water only. Followings are guide formulations for different silicone active content emulsions that can be commonly applied in textile finish process.

Potential Applications:

- 1): Fast hydrophilic property to all kind of fabrics or fibers, or some nanwoven;
- 2): Hydrophilic enhancer to be co-applied with other softeners, such as fatty acid flakes, amino-silicone;
- 3): Co-emulsifiers

Micro-emulsion for 23.0% of POWSIL-59256 Formulation

Composition	% wt
POWSIL-59256	30.0
Water	70.0

The diluted POWSIL-59256 can be applied to fabric. The optimum treatments are dependent on the required softness of the fabric and yarn after dyeing and finishing.

1. Pad-dry-cure process

Dosage	20-30g/L for light fabric or 30-50g/L for heavy fabric
pH	5.0-7.0
Temp.	Ambient temperature
Dry/Cure	120-170°C for 1-3 min

2. Exhaustion process

Dosage	2.0-3.0% (o. w.f.) on light fabric & 3.0-5.0% 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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Stripping

POWSIL-59256 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-59256 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.

POWSIL-59256 is packaged in net weight 190Kg plastic drum. POWSIL-59256 has a shelf life of 9 months under room temperature and hermetic condition without exposure to sunlight.

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.