

POWSIL™-59870

Amino Silicone Fluid

INTRODUCTION

POWSIL-59870 is a high molecular weight silicone fluid with low amino content that has been specifically designed for use as a textile softener. It can be easily emulsified into a stable micro emulsion, which imparts excellent softness and smoothness to a variety of fabrics, while minimizing yellowing.

BENEFITS

- Imparts good affinity to various fabrics;
- Imparts super slickness & remarkable softness to various fabrics;
- Imparts rebound or elastomeric property to various fabrics;
- Imparts lower yellowing effect on fabric due to lower amino content;
- Could be made into a micro-emulsion or white emulsion;
- Provides excellent cost-performance ratio.

TYPICAL PHYSICAL PROPERTIES

Appearance	Colorless to slight yellow transparent viscous or slightly turbid viscous liquid
Silicone Content (%)	100
Nonvolatile Content (%)	≥95.0
Viscosity (25°C, cSt)	5000 -8000
Specific gravity (25°C)	0.98
Refractive Index (25°C)	1.406
Amine equivalent (mmol/g)	0.20-0.30

APPLICATION

How to prepare a clear micro-emulsion

- A typical formulation & procedure (recommended)

Raw Materials	Wt%	Remarks
POWSIL-59870	15.0	Silicone oil
TDA-3 (Tridecyl alcohol ethoxylate with 3 EO) or AEO-6	0.85-0.90	Emulsifier, HLB: 8.6

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(Fatty alcohol ethoxylate with 6EO)		
TDA-6 (Tridecyl alcohol ethoxylate with 6 EO) or AEO-6	2.50-3.0	Emulsifier, HLB: 11.4
(Fatty alcohol ethoxylate with 6EO)		
TDA-9 (Tridecyl alcohol ethoxylate with 9 EO) or AEO-9	1.8-2.1	Emulsifier, HLB: 13.3
(Fatty alcohol ethoxylate with 9EO)		
Butylcarbato	2.7-3.0	Co-solvent. also called as diethylene glycol monobutyl ether
Acetic acid	0.3 – 0.4	
Final water	Balance to 100%	
Biocide	0.02	

Procedures:

1. Charge POWSIL-59870, TDA-3, TDA-6, TDA-9 and Butyl Carbitol into a mixing tank. And start to mix for 15-20 min;
2. Premix initial water and acetic acid to form an acidic solution. Charge the solution slowly into the soft grease. The charging should take about 30-60 minutes. After all of acidic solution has been added, continue to mix the content for 15 -25 min to get a clear grease;
3. Start to add the final water under stirring;
4. Reduce the agitation speed after $\frac{3}{4}$ of the final water has been charged. Continue to mix another 15 min after all the water has been charged;
5. Add biocide and mix for 10 minutes before drumming;
6. A clear emulsion will be obtained

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. If the product is separated, stir the contents. If the product is frozen, thaw it at warm condition and stir after thawed.

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When considering the use of a product in a particular application, review our latest Material Safety Data Sheets and ensure that the use intended can be accomplished safely.

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.

We specifically disclaim any other express or implied warranty of fitness for a particular purpose or merchantability. We disclaim liability for any incidental or consequential damages.

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