

# Magnasoft™ SciTex Textile Softener Concentrate

# **Product Description**

Magnasoft SciTex textile softener concentrate is a new, potentially cost-effective, silicone copolymer that can be considered for all levels of fabric finishing. It is easy-to-use and can deliver a multitude of desirable benefits related to moisture management; whiteness for bleached fabrics; color maintenance in dyed fabrics; and shear stability at wide pH and temperature ranges in finishing baths.

Magnasoft SciTex textile softener concentrate can achieve results without sacrificing fabric softness. It typically imparts a luxurious touch with a comfortably soft-feel on cotton and cotton blends, while maintaining the hydrophilic nature of cellulosic fabrics, and can provide a cotton-like feel when applied to synthetic fabrics such as polyester and polyester blends. Additionally, Magnasoft SciTex textile softener concentrate helps protect these treated fabrics from the effects of aging and various dry/cure conditions typically used in textile finishing.

Magnasoft SciTex textile softener concentrate is dispersible in water, with simple agitation in the presence of co-emulsifiers, and is compatible with most typical finishing chemicals such as organic softeners, durable press resins, anti-static agents and selective optical brightening agents. The resulting emulsion possesses excellent stability to high shear in textile finishing baths, even with broad pH and temperature differences.

Absorbing quickly and uniformly, Magnasoft SciTex textile softener concentrate can provide many desired features for premium fabric finishing at a reasonable cost.

#### **Key Features and Typical Benefits**

- Luxurious touch with ultra-soft feel for cotton knits
- Quick absorption of water and/or perspiration on the treated fabric
- · Limited impact of the hydrophilicity against the treated fabric aging time and high temperature curing
- Superior stability at broad pH and temperature ranges (e.g., up to 80 °C at pH10) in typical textile finishing processes
- Excellent shear stability in padding and exhaustion processes, including jet finishing and over-flow finishing
- May be compatible with durable press resin systems, anti-static agents and optical brightening agents
- Virtually no yellowing on the bleached fabrics and no discoloration on the dyed fabrics
- May improve phenolic yellowing, in conjunction with a pH adjustment to 4~5, with citric acid

#### **Typical Physical Properties**

| Appearance                                     | Pale yellow liquid     |  |
|--|------------------------|--|
| Viscosity at 25 °C, cSt                        | 1,500                  |  |
| Specific Gravity, 25/25 °C, gr/cm <sup>3</sup> | 1.02                   |  |
| Amine Content, %                               | 0.6                    |  |
| Preferred Diluent                              | Water with emulsifiers |  |

Typical properties are average data and are not to be used as or to develop specifications.

# **Potential Applications**

Magnasoft SciTex textile softener concentrate may be considered for a variety of fabrics in textile finishing, but is typically most beneficial for the cellulose fabrics listed below:

- Cotton and cotton blended knits and woven fabrics
- Viscose fabric and its blends
- Linen fabric and its blends
- Quick-drying cotton knits
- Polyester and polyamide woven fabrics requiring a cotton-like feel

Magnasoft SciTex textile softener concentrate is a concentration of a premium silicone softener; it needs to be pre-diluted with

surfactants in advance to applying at the textile finishing bath. The pre-dilution is simple, and can be obtained by using a simple mixer, or even by hand-stirring. A sample formulation for the pre-dilution is as follows:

# Sample Diluting Formulation

| Product                                       | % wt. | Note                                 |
|---|-------|--------------------------------------|
| Magnasoft SciTex textile softener concentrate | 27.0  | Premium textile softener concentrate |
| TDA-6   | 4.2   | Tri-decyl alcohol 6 ethoxylated      |
| TDA-12  | 8.8   | Tri-decyl alcohol 12 ethoxylated     |
| Acetic Acid                                   | 0.3   | pH buffer                            |
| Sodium Acetate                                | 0.3   | pH buffer                            |
| Water   | 59.4  | _                                    |

Product formulations are included as illustrative examples only. Momentive makes no representation or warranty of any kind with respect to any such formulations, including, without limitation, concerning the efficacy or safety of any product manufactured using such formulations.

#### Procedure for Pre-dilution

- 1. Charge Magnasoft SciTex textile softener concentrate and emulsifiers, and then mix well until fully homogenous
- 2. Pre-mix acetic acid and sodium acetate with water
- 3. Slowly add the acidic water solution to the silicone/emulsifier blend while stirring; avoid stirring too much to prevent aerating the mixture
- 4. Filter into the containers

Magnasoft SciTex textile softener concentrate can be applied by padding and exhaustion, including jet-finishing and over-flow finishing. The use level is subject to the types of fabric and softness required; but 10~20 g/l of 27 % pre-diluted Magnasoft SciTex textile softener concentrate is typically recommended.

It is best to use soft water for dilutions. If not available, it is imperative to test the complete bath for stability before applying it in production.

# **Patent Status**

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

# **Product Safety, Handling and Storage**

Customers should review the latest Safety Data Sheet (SDS) and label for product safety information, safe handling instructions, personal protective equipment if necessary, emergency service contact information, and any special storage conditions required for safety. Momentive Performance Materials (MPM) maintains an around-the-clock emergency service for its products. SDS are available at <a href="https://www.momentive.com">www.momentive.com</a> or, upon request, from any MPM representative. For product storage and handling procedures to maintain the product quality within our stated specifications, please review Certificates of Analysis, which are available in the Order Center. Use of other materials in conjunction with MPM products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

#### Limitations

Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use intheir particular applications.

# **Customer Service Centers**

For additional information, please contact our Customer Service Team

| AMERICAS                                    | +1 800 295 2392 Toll Free*<br>+704 805 6946 Direct Number   |
|---|---|
| LATIN AMERICA                               | BRAZIL +55 11 4534 9650 Direct Number MEXICO +52 55 2169 7670 Direct Number *All American countries   |
| EMEAI – EUROPE, MIDDLE EAST, AFRICA & INDIA | EUROPE +390510924300 Direct Number INDIA, MIDDLE EAST & AFRICA +91 44 71212207 Direct Number* *All Middle Eastern countries, Africa, India, Pakistan, Bangladesh, Sri Lanka   |
| ASIA PACIFIC                                | CHINA  800 820 0202 Toll Free +86 21 3860 4892 Direct Number  JAPAN +81 3 5544 311 Direct Number  KOREA +82 2 6201 4600 Direct Number  SOUTH EAST ASIA, AUSTRALIA & NEW ZEALAND +60 3 9206 1543 Direct Number* *All East Asia countries (Malaysia, Singapore, Thailand, Indonesia, Vietnam, Philippines, Cambodia, Myanmar / other countries located in Pacific region) |
| Visit us at www.momentive.com               |   |

DISCLAIMER - THE MATERIALS, PRODUCTS AND SERVICES OF MOMENTIVE PERFORMANCE MATERIALS INC. AND ITS SUBSIDIARIES AND AFFILIATES (COLLECTIVELY "SUPPLIER"), ARE SOLD SUBJECT TO SUPPLIER'S STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN THE APPLICABLE DISTRIBUTOR OR OTHER SALES AGREEMENT, PRINTED ON THE BACK OF ORDER ACKNOWLEDGMENTS AND INVOICES, AND AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION, RECOMMENDATIONS, OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SUPPLIER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING ITS PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. EXCEPT AS PROVIDED IN SUPPLIER'S STANDARD CONDITIONS OF SALE, SUPPLIER AND ITS REPRESENTATIVES SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS OR SERVICES DESCRIBE HEREIN.

Each user bears full responsibility for making its own determination as to the suitability of Supplier's materials, services, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating Supplier's products, materials, or services will be safe and suitable for use under end-use conditions. Nothing in this or any other document, nor any oral recommendation or advice, shall be deemed to alter, vary, supersede, or waive any provision of Supplier's standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Supplier. No statement contained herein concerning a possible or suggested use of any material, product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Supplier covering such use or design, or as a recommendation for the use of such material, product, service or design in the infringement of any patent or other intellectual property right.

The use of the "TM" symbol designates registered or unregistered trademarks of Momentive Performance Materials Inc. or its affiliated companies.

Momentive and the Momentive logo are registered trademarks of Momentive Performance Materials Inc.

Copyright 2022 Momentive Performance Materials Inc. All rights reserved.



momentive.com