

Magnasoft^{*} SRS

textile softener

Product Description

Magnasoft SRS textile softener is a novel linear, polydimethylsiloxane-amino polyalkyleneoxide copolymer. It is designed to provide soft, silky, full hand to fabrics treated with fluorocarbon soil release additives, while incurring little or no interference with the soil release properties. The softness provided by Magnasoft SRS softener is durable for numerous detergent washes. Magnasoft SRS textile softener imparts superior softness and very low yellowing, compared to conventional aminosilicones, when applied to a wide variety of fabrics.

In addition, fabrics treated with Magnasoft SRS textile softener are not hydrophobic. It imparts a slow-wetting character to fabrics.

Key Features and Typical Benefits

Magnasoft SRS textile softener provides performance properties in both the textile finishing process and the treated fabric:

- Does not interfere with soil release properties of fabrics treated with fluorocarbon soil release agents
- Can be coapplied with fluorocarbon soil release agents
- Provides a high level of softness for all types of fabrics
- Is easily diluted with water or alcohol
- Provides dilutions that are extremely shear stable
- Provides water dilutions that have excellent compatibility with finishing baths
- Very low yellowing
- Is an excellent material of choice for all normal application methods such as pad bath, exhaustion and spray

Momentive Performance Materials provides versatile materials as the starting point for our creative approach to ideas that help enable new developments across hundreds of industrial and consumer applications. We are helping customers

solve product, process, and performance problems; our silanes, fluids, elastomers, sealants, resins, adhesives, urethane additives, and other specialty products are delivering innovation in everything from car engines to biomedical devices.

From helping to develop safer tires and keeping electronics cooler, to improving the feel of lipstick and ensuring the reliability of adhesives, our technologies and enabling solutions are at the frontline of innovation.



Magnasoft* SRS textile softener

Typical Physical Properties

Appearance	Translucent yellow liquid
Viscosity at 25°C, cP	2500
Specific Gravity, 25/25°C	1.02
Amine Content, %	0.13
Active Copolymer Concentration, %	30
Solvent	Dipropylene glycol
Preferred Diluent	Water

All treatments also contained 10% of a 44% solids DMDHEU resin catalyzed with 1.5% catalyst. To improve pad bath compatibility, 0.5% of a secondary alcohol ethoxylate surfactant with an HLB of 15 was used.

The data in Table 1 indicate that Magnasoft SRS textile softener provides superior softness, along with very little loss in soil release properties. It also provides durable softness to the fabric, since the treated fabric retained most of its initial softness — even after five washings. Soil release performance with Magnasoft SRS textile softener is only slightly reduced over that obtained with fluorocarbon alone.

Potential Applications

Magnasoft SRS textile softener is a great candidate for use in textile finishing as a premium softener for all types of fabrics, including cotton, synthetics and cotton/synthetic blends, and especially for those that are also treated with fluorocarbon soil release agents. It is a very effective softener for use in wrinkle-free garments that are treated with durable press resin and fluorocarbon soil release agent. It is also a superior softener for knit and woven fabrics, including those that are durable press resin-treated. Since Magnasoft SRS textile softener does not require emulsification, its water dilutions have excellent shear stability. Therefore, it is an excellent softener for applications where normal, emulsified softeners do not show adequate shear stability (such as in EVAC systems).

Magnasoft SRS textile softener is normally applied as a water dilution that is blended into the treatment bath formulation to provide the desired silicone add-on.

Performance

Soil Release and Softness

The data presented below demonstrate the superior soil release and softness provided by Magnasoft SRS textile softener to fluorocarbon and durable press resin treated 100% cotton twill. Performance was compared to that of:

- LE-460, a conventional dimethyl silicone emulsion
- Magnasoft Plus softener, a high-performance aminosilicone
- Magnasoft HSSD hydrophilic softener, a silicone-amino-polyalkyleneoxide terpolymer
- 80/20 blend of Magnasoft HSSD and Magnasoft Plus softeners

Table 1: Soil Release Rating, Softness and Silicone Durability on 100% Cotton Twill Fabric Treated with 1.0% FC-248, 1.0% Silicone, BOWF

Treatments	Soil Release Rating ⁽¹⁾ (Dirty Motor Oil)				Softness ⁽²⁾		
	Initial	1 Wash	5 Washes	Re-Stain & 1 Wash	Initial	1 Wash	5 Washes
(Silicone/FC-248/Resin)							
Magnasoft SRS textile softener	1	3	3.5	3.5	7	7	6
Magnasoft HSSD textile softener	1	3	3.5	3	5	3	3
Magnasoft Plus textile softener	1	1.5	3	2	8	6	5
Magnasoft HSSD textile softener/ Magnasoft Plus textile softener, 4/1 Blend	1	2	3.3	3	6	4	3
LE-460	1	2	3	3	4	3	3
FC-248/Resin Only	1	3.5	4	4	2	2	2

(1) Soil Release was determined by AATCC Test Method 130-1990, using the Stain Replic Scale: 1-5. Washed with 120°F water.

(2) Softness was rated by a Hand Panel of five people. Softness Rating Scale: 8 = Very soft, 1 = Harsh.

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 considering the use of this product should review the latest Material Safety Data Sheet and label for product safety information, handling instructions, personal protective equipment if necessary, and any special storage conditions required. Material Safety Data Sheets are available at www.momentive.com or, upon request, from any Momentive Performance Materials representative. Use of other materials in conjunction with Momentive Performance Materials 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 in their particular applications.

Emergency Service

Momentive Performance Materials maintains an around-the-clock emergency service for its products. The American Chemistry Council (CHEMTREC), Transport Canada (CANUTEC), and the Chemical Emergency Agency Service also maintain an around-the-clock emergency service for all chemical products:

Location	Momentive Performance Materials Products	All Chemical Products
Mainland U.S., Puerto Rico	518.233.2500	CHEMTREC: 800.424.9300
Alaska, Hawaii	518.233.2500	CHEMTREC: 800.424.9300
Canada	518.233.2500	CANUTEC: 613.996.6666 (collect) or CHEMTREC: 800.424.9300
Europe, Middle East, Africa	+32.(0)14.58.45.45 (Belgium)	CHEMTREC: +1-703.527.3887 (collect)
Latin America, Asia/Pacific, all other locations worldwide	+518.233.2500	CHEMTREC: +1-703.527.3887 (collect)
At sea	Radio U.S. Coast Guard, which can directly contact Momentive Performance Materials at 518.233.2500 or CHEMTREC at 800.424.9300.	

DO NOT WAIT. Phone if in doubt. You will be referred to a specialist for advice.

Principal Locations

Regional Information	Phone	Fax
North America World Headquarters 187 Danbury Road Wilton, CT 06897, USA	800.295.2392	607.754.7517
Latin America Rodovia Eng. Constâncio Cintra, Km 78,5 Itatiba, SP – 13255-700 Brazil	+ 55.11.4534.9650	+ 55.11.4534.9660
Europe, Middle East, Africa and India Leverkusen Germany	00.800.4321.1000 + 31.164.293.276	+ 31.164.241750
Pacific Akasaka Park Building 5-2-20 Akasaka Minato-ku, Tokyo 107-6112 Japan	+ 81.3.5544.3100	+ 81.3.5544.3101
Customer Service Centers		
North America Charleston, WV 25314, USA E-mail: cs-na.silicones@momentive.com	Specialty Fluids 800.523.5862	304.746.1654
	UA, Silanes, Resins, and Specialties 800.334.4674	304.746.1623
	RTV Products-Elastomers 800.332.3390	304.746.1623
	Sealants and Adhesives and Construction 877.943.7325	304.746.1654
Latin America Argentina and Chile Brazil Mexico and Central America Venezuela, Ecuador, Peru, Colombia, and Caribbean E-mail: cs-la.silicones@momentive.com	+ 54.11.4862.9544 + 55.11.4534.9650 + 52.55.5899.5135 + 58.212.285.2149	+ 54.11.4862.9544 + 55.11.4534.9660 + 52.55.5899.5138 + 58.212.285.2149
Europe, Middle East, Africa and India E-mail: cs-eur.silicones@momentive.com	00.800.4321.1000 + 31.164.293.276	+ 31.164.241750
Pacific E-mail: cs-ap.silicones@momentive.com Japan China Korea Singapore	+ 81.276.20.6182 + 86.21.5050.4666 (ext. 1523) + 82.2.6201.4600 + 65.6220.7022	
Worldwide Hotline Worldwide Web	800.295.2392 www.momentive.com	+ 607.786.8131 + 607.786.8309

THE MATERIALS, PRODUCTS AND SERVICES OF THE BUSINESSES MAKING UP MOMENTIVE PERFORMANCE MATERIALS INC., ITS SUBSIDIARIES AND AFFILIATES, ARE SOLD SUBJECT TO MOMENTIVE PERFORMANCE MATERIALS INC.'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, MOMENTIVE PERFORMANCE MATERIALS INC. 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 MOMENTIVE PERFORMANCE MATERIALS INC. STANDARD CONDITIONS OF SALE, MOMENTIVE PERFORMANCE MATERIALS INC. BUSINESS AND ITS REPRESENTATIVES SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS OR SERVICES DESCRIBED HEREIN. Each user bears full responsibility for making its own determination as to the suitability of Momentive Performance Materials Inc.'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 Momentive Performance Materials Inc.'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 Momentive Performance Materials Inc.'s Standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Momentive Performance Materials. 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 Momentive Performance Materials Inc. or any of its subsidiaries or affiliates 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.