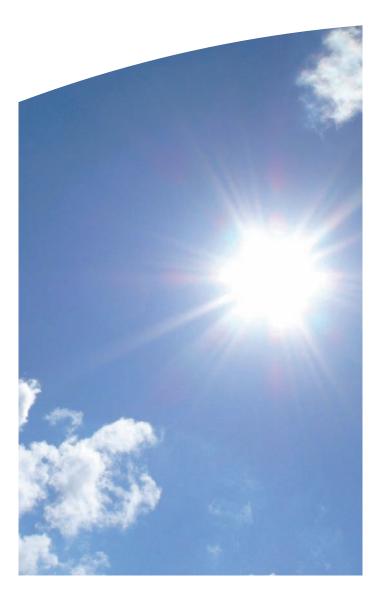


textile & leather





Sasol Wax is the leading specialist in innovative wax technology.



at a glance

Paraffin wax is the major raw material for the production of candles and a wide variety of other applications such as rubber & tires, chipboard, food-processing and packaging, pharmaceuticals, cosmetics, inks paints & coatings, textiles as well as in road construction and many more.

For many decades Sasol Wax has focussed on the development of paraffin waxes and specialty wax blends for a lot of different industries. Due to the wide range of our products, we are able to offer solutions suitable for almost all production processes.

Micro and macro crystalline waxes are renown for a broad spectrum of applications. Their use ranges from rather simple applications to process oriented tailor-made products for state of the art production equipment. Specialties are created for innovative solutions.

Refined paraffin waxes are mixtures of saturated hydrocarbon, purified by modern, environmentally friendly technologies. All our products are constantly monitored by a stringent quality control and are non-toxic. Their environmental properties are characterized by good biodegradability and non-cumulative effects.

textile & leather



Natural fibres contain wax-like substances as a protective agent against atmospheric and biological influences. The removal of these substances during processing alters the frictional and absorbency characteristics of the fibres, resulting in a loss of softness, pliability and elasticity, making it necessary to reapply a suitable finish. It is also necessary to lubricate synthetic fibres for high speed processing.

Wax Performance in Textiles

Wax emulsions are used by the textile industry in four main areas:

- Waterproofing of textile substrates
- Modifying the frictional properties of fibres, yarns and sewing threads to enhance processability
- Enhancing the performance of finishing compounds such as softeners, silicones and resins
- Providing superior fabric properties such as improved flex abrasion resistance, tear strength and sewability

A number of different types of white oils, petroleum jellies and waxes are used in the textile industry to improve the fabric tear strength, flex abrasion resistance, sewability, yarn knitability and the feel of the fabric.

The treatment with Sasolwax paraffin waxes improves the processing of yarns, for example during warp sizing. It reduces fibre-to-fibre friction or fibre-to-metal friction in fast moving weaving machines, with the result that processing problems during the weaving process are reduced and the production

output is optimised. The paraffin wax treatment often remains on the textile and improves the "feel" of fabric. Sasol Wax has developed a specialised range of oxidised and saponified Sasolwax Fischer-Tropsch waxes for use in the textile industry. These grades have been specifically developed to enhance processability, from easier emulsification and application through to final fabric performance in such areas as sewability, knitability, flex abrasion resistance and tear strength. The excellent performance of the Sasolwax products enables lower application levels than with Polyethylene waxes, providing the opportunity to reduce raw material costs. In areas where the use of wax may impair the fabric handle or drape the lower application levels using Sasolwax may be advantageous.

Leather and Fabric Impregnation

Sasolwax paraffin waxes are ideally suited for fabric impregnation in order to improve the water repellence of the fabric. In conjunction with zirconic salt, wash resistant impregnation effects are achieved. For formulations with petroleum jellies served as fat components and white oils, paraffin waxes in their pure or chemically modified form, are used for the greasing and waxing of leather following tanning, in order to achieve phase-isolating lubrication and water repellence. Incorporated in emulsions paraffin waxes have the advantage that small particles are able to penetrate the leather capillaries more effectively (Licker greasing). Licker greasing plays an important role in leather which is used for the production of shoes, luggage, overcoats and for technical functions.

Natural materials contain wax-like substances as protective agents against atmospheric and biological influences.





Leather and Fabric Impregnation



Technical grade White Oils

	Colour Saybolt	Density at 15 °C [kg/m³]	Viscosity at 20 °C [mm ² /s]	Pourpoint [°C]
CoxTWO 40	+28 min	840 - 865	37 - 42	-12 max
CoxTWO 50	+22 min	840 - 865	55 typical	-12 max

Pharmaceutical grade White Oils

	Colour Saybolt	Density at 15 °C [kg/m³]	Viscosity at 20 °C [mm ² /s]	Pourpoint [°C]
MERKUR WOP 40 PB	+30	830 - 865	30 - 60	
MERKUR WOP 240 PB	+30	860 - 880	190 - 250	-9 max

Technical grade Petroleum Jelly

	Colour ASTM	Congealing Point [°C]	Cone Penetration at 25 °C [1/10 mm]	Viscosity at 100 °C [mm ² /s]
CoxTEC 5155	0.5 - 1.0	49 - 57	140 - 175	4.0 - 8.0
COX GX	1.5 - 4.5	50 - 60	140 - 170	4.0 - 8.5
CoxTEC 5158	0 - 1	50 - 55	165 - 185	6.5 - 8.5

Sasolwax Paraffin Waxes

	Congealing Point [°C]	Oil Content [%]	Penetration at 25°C [1/10 mm]
Sasolwax 5403	54 - 56	0 - 0.5	16 - 20
Sasolwax 5413	54 - 56	0 - 1.5	25 - 32
Sasolwax 5603	56 - 58	0 - 0.5	15 - 19
Sasolwax 4110P	60 - 62	0 - 0.5	13 - 16

Finishing and Sewability

In a number of processing steps in the textile and leather industries, Sasolwax Fischer-Tropsch waxes are used either directly, or as important components of textile auxiliary chemicals. These waxes improve the ease of textile processing, as well as the finish and performance of the final article. Our products, designed for these applications, are emulsifiable under pressure or atmospheric conditions and are easy to incorporate into various process steps during textile and leather processing.

Sasolwax Fischer-Tropsch waxes are preferred ingredients for manufacturing of cationic and non-ionic sewing auxiliaries.

Modified Fischer-Tropsch Waxes

	Congealing Point typical [°C]	Acid Value [mg KOH/g]	Penetration at 25 °C [1/10 mm]
Sasolwax AP5	97	10 - 14	< 2
Sasolwax A2	89	9 - 13	< 4
Sasolwax A28	95	27 - 29	< 4





Wax solutions for every process



global contacts

33		wwv	v.sasolwax.coi
Germany	Sasol Wax GmbH Worthdamm 13 - 27 20457 Hamburg, Germany	Fon: +49 40 78115 0 Fax: +49 40 78115 670	Volker Lichter volker.lichter@de.sasol.com
Europe	Sasol Wax GmbH Worthdamm 13 - 27 20457 Hamburg, Germany	Fon: +49 40 78115 0 Fax: +49 40 78115 670	Diek Tijsseling diek.tijsseling@de.sasol.cor
Southern Africa	Sasol Wax (South Africa) PO Box 1 Sasolburg 1947, South Africa	Fon: +27 31 460 3305 Fax: +27 11 522 7345	Sidney Subramony sidney.subramony@sasol.co
Middle East	Alexandria Wax Products Company S.A.E. El Salam Building 19, Kamal Eldeen Salah St. Sumoha-Alexandria, Egypt	Fon: +20 3 420 5210 Fax: +20 3 425 4426	Mohamed Mansour m.mansour@alexandria-wax
USA, Canada and Mexico	Sasol Wax North America Corp. 21325-B Cabot Blvd Hayward, CA 94545, USA	Fon: +1 510 783 9295 ext 216 Fax: +1 510 670 8659	Anton Smit anton.smit@us.sasol.com
Latin America	Sasol Wax GmbH Worthdamm 13 - 27 20457 Hamburg, Germany	Fon: +49 40 78115 0 Fax: +49 40 78115 759	Svenja Emmerich svenja.emmerich@de.sasol
Asia	Sasol Wax Sdn Bhd. Suite 11.6, Level 11 Menara Great Eastern, 303 Jalan Ampang 50450 Kuala Lumpur, Malaysia	Fon: +60 3 4252 8755 Fax: +60 3 4252 0155	Darryl Tan darryl.tan@ap.sasol.com
Australia	Sasol Wax Australia Pty Ltd Suite 202, 4 -10 Bridge Street Sydney, Australia	Fon: +61 2 9983 9177 Fax: +61 2 9933 9199	Graham Steele graham.steele@ap.sasol.cor

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