



SASOL

Industrial Waxes Inks

Sasol Performance Chemicals



About Us

Sasol's Performance Chemicals business unit markets a broad portfolio of organic and inorganic commodity and speciality chemicals. Our business consists of four key business divisions: Organics, Inorganics, Wax and PCASG (Phenolics, Carbon, Ammonia and Speciality Gases). About 6300 people including employees from our Regional Operating Hubs in 18 countries serve customers around the world with a multi-faceted portfolio of state-of-the-art chemical products and solutions for a wide range of applications and industries.

At a Glance

The Wax Division of Sasol Performance Chemicals is a leading specialist in innovative wax technology.

For many decades the Wax Division of Sasol Performance Chemicals has focused on the development and sales of paraffin waxes, micro waxes, synthetic waxes and blends or emulsions thereof. Today we serve different industries like inks, paints & coatings, rubber & tire, paper & packaging, textiles, cosmetics as well as road construction, candles and many others.

Micro and macro crystalline waxes are renowned for a wide range of possible applications. Their use ranges from rather simple applications to process oriented tailor-made blends for state-of-the-art production equipment. Specialties are created for innovative solutions.

Refined paraffin waxes are blends of saturated hydrocarbons, purified by modern, environmental friendly technologies. All our products are constantly monitored by a stringent quality control system and are nontoxic. Their environmental properties are characterized by inherent biodegradability and non-cumulative effects.

Wax solutions for every process.



Printing Inks

The Wax Division of Sasol Performance Chemicals, one of the largest producers of petrochemical and Fischer-Tropsch waxes in the world, produces a number of specialised wax grades in liquid, micronized, flaked and pelletized form for use in the printing ink industry.

Utilisation of the Fischer-Tropsch process together with state of the art fractionation, micronisation and blending facilities enables Sasol Performance Chemicals to produce superlative products targeted to satisfy the needs of ink makers in every application area as well as intermediate wax grinders, dispersion or compound producers.

Waxes are used as additives in printing inks to:

- improve the resistance of the ink film to rubbing and scuffing
- serve as a slip aid.

Micronized Powders

Sasol Performance Chemicals offers a range of micronized waxes. The defined particle size of our micronized powders and the low surface tension of Sasolwax Fischer-Tropsch waxes ensure excellent slip performance in a variety of different types of inks. Our micronized waxes are produced by the use of spraying or grinding processes.

Sasolwax Spray 30-G is a medium melting point, economical, fine micronized wax powder with good rub resistance and excellent slip and gloss performance. This product is particularly applicable in lithographic heat set inks due to its low melting point and excellent slip performance. It also performs very well as an additive to water based inks provided high speed mixing equipment is used for dispersion of the wax into the ink. Spray 30G-EF is the extra fine version of Spray 30-G with even smaller particle size.

Sasolwax Spray 105-G is a high melting, high performance, micronized wax with excellent rub resistance, slip performance and good gloss. It has been developed specifically for applications where high rub resistance is required. This product is resistant to most printing ink solvents and may be used as a high performance additive in most solvent based printing inks. Because of a higher surface tension than Sasolwax Spray 30, this product may be overprinted with most commercial UV varnishes, and is therefore applicable for use in lithographic sheet fed inks. Spray 105G-EF is the extra fine version of Spray 105-G with even smaller particle size.

Sasolwax H1N4-G is a micronized powder. This product improves the performance of newspaper inks without impacting significantly on cost.

Sasolwax Aqua 30-G is a chemically modified hard wax available in fine powder form. It is designed for improved powder dispersability into water based ink systems. The wax provides good rub resistance, slip and gloss to the final ink. Aqua 30G-EF is the extra fine version of Aqua 30-G with even smaller particle size.

Microcrystalline waxes are the base materials for heat set ink compounds. With our flexible production technique we are able to design these materials specifically for each customer to provide the best possible results.



Sasol Performance Chemicals provides good rub resistance slip and gloss to the final ink.

Technical Data

Printing Inks

Application	Products
Lithography Sheet-fed	Spray 30-G/-EF, Spray 105-G/-EF
Lithography Web-fed Heat-set	Petroleum Jellies, Paraffin & Microcrystalline waxes
Lithography Web-fed Cold-set	Spray 30-G/-EF, Spray 105-G/-EF
Flexography / Gravure / Screen Printing	Spray 105-G/-EF, Aqua 30-G/-EF
Digital Printing Inkjet	Spray 105-G/-EF, Aqua 30-G/-EF, Spray 30-G/-EF, Narrow cuts
Digital Printing Xerography	Narrow cuts
Thermal Transfer Ribbon	Narrow cuts
Energy Curable Inks	Spray 105-G/-EF, Aqua 30-G/-EF, Spray 30-G/-EF, Narrow cuts

Petroleum Jelly

In the production of printing inks, petroleum jelly serves significant reduction of „Tack“, without affecting the viscosity in the process. Petroleum jelly is principally used in all types of printing inks, however the main use is in the field of heat set and offset inks.

For applications in the printing ink industry, we recommend MERKUR 500.

	Colour Lovibond	Congealing Point [°C]	Cone Penetration at 25 °C [1/10 mm]	Viscosity at 100 °C [mm ² /s]
MERKUR 500	0 - 0.5	50 - 56 min	140 - 160	5.0 - 9.0

Sasol Fischer-Tropsch Waxes

The base waxes are available in coarse powder, flake and pastille form for use by intermediate grinders and compounders.

Sasolwax H1, a high melting Fischer-Tropsch wax with a molecular weight of 750 g/mol, is available in flaked and pellet form and is mostly used by intermediate companies who do wax grinding. Due to its economical cost performance ratio, this product is ideal for blending with high priced grades such as PTFE. **Processed for use in: Lithographic heat set inks / Water based liquid inks / Wax blend component**

Sasolwax C105, a high melting point high performance wax with a molecular weight of 1300 g/mol is available in pellet form. This product, with a narrow carbon distribution, is particularly applicable for use in the production of wax compounds. Its narrow crystallisation curve and lack of low boiling components, leads to very controllable compound production.

Production of compounds for: Lithographic sheet fed ink / Lithographic heat set ink

Sasolwax A28, available in a coarse powder form, is a chemically oxidised hard wax which has been specifically developed for incorporation into water based inks. This product may be easily emulsified. It can be used in water based inks to provide excellent rub resistance, slip and gloss. **Making emulsions for: Water based liquid inks**

Micronized Fischer-Tropsch Waxes

	Congealing Point [°C]	Penetration at 25 °C [1/10 mm]	Particle Size ave/max [µm]
Sasolwax Spray 30-G	96 - 100	< 1	7/14
Sasolwax Spray 30G-EF	96 - 100	< 1	5/10
Sasolwax Spray 105-G	102 - 108	< 1	7/14
Sasolwax Spray 105G-EF	102 - 108	< 1	5/10
Sasolwax Aqua 30-G	> 95	< 1.5	7/14
Sasolwax Aqua 30G-EF	> 95	< 1.5	5/10
Sasolwax H1N4-G	96 - 100	< 1	8/25





SASOL

At your service

Sasol Performance Chemicals

Wax Division

Worthdamm 13–27
20457 Hamburg, Germany

industrial.waxes@de.sasol.com

Global Contacts

Europe	+49 40 78115 0	wax@de.sasol.com
North America	+1 510 232 8704	wax@us.sasol.com
Latin America	+55 11 4612 8199	wax@us.sasol.com
	+55 11 2898 9768	
Asia-Pacific	+86 21 22 180581	wax@ap.sasol.com
Middle East	+20 3 420 52 10	wax@alexandria-wax.com
Africa	+27 16 960 2088	sasol.wax@sasol.com

www.sasol.com

Sasol is a registered trademark of Sasol Ltd. Product trademarks displayed in this document are the property of the Sasol Group of Companies, except where it is clear from the context that not. Users of this document are not permitted to use these trademarks without the prior written consent of their proprietor. All rights not expressly granted are reserved.

Disclaimer: The information contained in this document is based on Sasol's knowledge and experience at the time of its creation. We reserve the right to make any changes to this document or the products described therein, as a result of technological progress or developments. This information implies no liability or other legal responsibility on our part, including with regard to existing third-party patent rights. In particular, no guarantee or warranty of properties in the legal sense is implied. The customer is not exempted from the obligation to conduct careful inspection and testing of incoming goods. Reference to trademarks used by other companies is neither a recommendation, nor should it give the impression that products of other companies cannot be used. All our business transactions are governed exclusively by our General Business Conditions.