sasol
reaching new frontiers

industrial coatings

Sasol Wax
Wax is all we do. So we do it best.

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***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.

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Waxes play an important role in the manufacturing of surface treatment materials. Sasol Wax offers the full range of petrochemical and synthetic Fischer–Tropsch waxes, white oils and petroleum jellies to fulfil the special requirements of your process.

The role of Wax in Paints & Coatings

Characteristic	Powder	Can	Coil	Wood	Marine	Automotive
Rub / Scuff / Mar resistance		•	•			
Anti-blocking	•		•	•		
Water resistance				•		
Slip increase		•	•			
Lubrication (during manufacture)	•					
Pigment wetting (dispersibility)	•					
Grinding aid	•					
Reduced caking	•					
Flow additive	•					•
Product (content) release		•				
Higher coating flexibility	•	•				
Anti-weathering				•		
Water mark resistance				•		
Barrier effect				•		
Maintenance aid					•	

Paraffin Waxes for Paints and Coatings

	Congealing Point [°C]	Oil Content [%]	Penetration at 25°C [1/10 mm]	Viscosity at 100 °C [mm²/s]
Sasolwax 3971	70 - 75	0 - 2.0	25 - 33	12 - 16
Sasolwax 1803	68 - 74	0 - 1.0	10 - 15	7 - 12
Sasolwax 6404	62 - 65		16 - 22	5 - 7
Sasolwax 5803	55 - 60	0 - 0.5	15 - 19	4 - 5
Sasolwax 5203	52 - 54	0 - 0.5	16 - 20	

Water based Wax Emulsions in Paints and Coatings

	Water Content [%]	Viscosity typical [mPa • s]	pH typical	Emulsifier
HydroWax 213*	63 - 67	200	6	anionic
HydroWax 345	50 - 54	700	8	anionic
HydroWax 638	38 - 42	400	6	cationic
HydroWax C	52 - 56	400	9	anionic
HydroWax RV	48 - 52	800	7	anionic

** complies with FDA and/or BfR regulations*

Sasolwax Fischer-Tropsch Waxes

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

Powder Coatings: Sasolwax Spray 105, A28 | **Water based Wood and Metal Coatings:** Sasolwax Aqua 30
Oil based Wood and Metal Coatings: Sasolwax Spray 30, Spray 105

Corrosion Protection

Waxes and petroleum jellies are excellent corrosion protection agents. The materials are applied in a molten state or at room temperature if emulsions or salve-like products are used. All products have an excellent wetting behaviour of the surface which has to be protected. The temporary corrosion protection emulsion can be removed easily by hot water or high pressure water jets. Technical grade petroleum jellies will not saponify and are free of resins, acids, alkaline substances, oxidised components and metals.

Petroleum Jellies for Corrosion Protection and Cable Lubricants

	Colour ASTM	Congealing Point [°C]	Cone Penetration at 25 °C [1/10 mm]	Viscosity at 100 °C [mm²/s]
COX GX*	1.5 - 4.5	50 - 60	140 - 170	4.5 - 8.5
CoxTEC 5155	0.5 -1.0	49 - 57	140 - 175	4.0 - 8.0
CoxTEC 5146		60 - 70	50 - 65	10 - 15
CoxTEC 5157		70 - 80	45 - 65	9.0 - 18
CoxTEC 5158	0 - 1.5	50 - 55	165 - 185	6.0 - 9.0

** Petroleum Jellies for Construction Ties (Approval Z-13.2-61 from DIBT has been submitted); DIBT: Deutsches Institut für Bautechnik*

Waxes for general Corrosion Protection

	Congealing Point [°C]	Oil Content [%]	Penetration at 25°C [1/10 mm]	Viscosity at 100 °C [mm²/s]
Sasolwax 3735	68 - 75	4 - 8	60 - 120	12 - 18
Sasolwax 8287	72 - 76		50 - 65	12 - 16
Sasolwax 5891	70 - 75	0 - 1	11 - 15	12.5 - 14.5
Sasolwax 3277	77 - 82	0 - 2	14 - 21	16 - 20
Sasolwax 5669	66 - 71		90 - 140	16 - 20

Water based Temporary Corrosion Protection

	Viscosity at 25 °C [mPa • s]	pH	Non-volatile Content [%]
Sasolwax Protect	200 - 800	9.0 - 10.5	36 - 40

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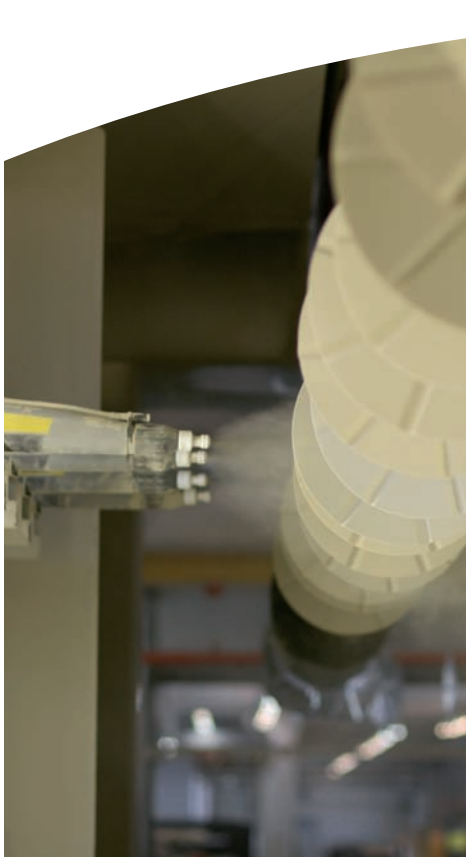
Mechanism of wax functions in Coatings

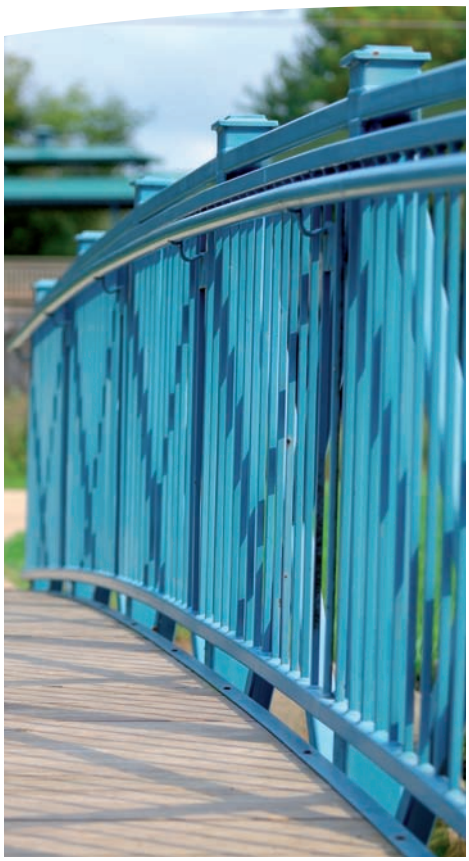
Bloom effect

- Wax melts and blooms (floats) to surface
- Bloom aided by incompatibility with coating system
- Wax forms layer

Ball bearing effect

- Thin films (2-3 microns)
- Wax particles same size or bigger than film thickness
- Optimum performance – narrow particle size distribution (PSD)
- Fast drying films – no time for migration





Wax solutions for every process

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