

sasol
reaching new frontiers



Sasol Wax - *Candle Industry*
Your visions - our challenge



The candle is a product steeped in tradition with a long and colourful history. It was initially produced by hand, later also by mechanized production processes and now by fully automated manufacturing. The quality requirements of candles are also being constantly upgraded to fulfil the demands of environmentally aware consumers for high quality products. Flexibility and competence are a must in order to provide client-oriented product solutions.

As the producer of the main raw material, paraffin wax, Sasol Wax successfully meets these challenges. We develop our wide product range of candle paraffin waxes in close consultation with our partners in the candle industry, with associations and consumer groups. The targeted selection of raw materials and individual control over our modern plants enable us to offer you tailor-made paraffin waxes. Our clients' needs are foremost in our mind from the research and development phase on.

We guarantee the high purity of our products through careful processing and purification with the aid of intricate procedural steps. Our highly refined types of paraffin wax are of hydrogenation quality and are entirely harmless from a toxicological viewpoint. Constant controls guarantee the highest product quality. Certifications of the business in accordance with DIN EN ISO 9001/9002 as well as environmental certification in accordance with DIN 14001 bear testimony to our high standards of quality.

We focus on the future with early system optimization of the candle's manufacturing process encompassing the elements material, production technology and know-how coupled with communication. We aim to continuously optimize systems through targeted collaboration with candle manufacturers, machine manufacturers and material specialists (e. g. wick, colour, fragrance, lacquer) as timely, professional co-operation ensures costeffectiveness. Problem avoidance from the outset rather than subsequent problem solution is our motto. CIP, the continuous improvement process, is thus a key factor for us.

In addition to physical key data, we will provide you with advice regarding processing conditions and process-specific characteristics. Long-term fundamental analyses, e. g. in the subjects listed below, is the basis for this:

- *Crystallization behaviour and its consequences*
- *Thermo-technical behaviour*
- *Air solubility in types of paraffin wax*
- *Blends with other raw materials used in the candle industry, such as stearic acid, beeswax and fat*
- *Additives and their effects*
- *Factors influencing burning behaviour*
- *Influence of fragrances on the structures of paraffin wax*

Systematic analyses, tests regarding burning behaviour, formulation developments, as well as comprehensive application technology-based consultations and training at our plant or on your premises are further integral components of our service package.

Specific conditions during candle production require individual measures. As well as being specialists with an eye for holistic process flows we consider ourselves as service providers to candle producers. The processing focus is on complete system solutions over and above the individual product.

Sasol Wax GmbH

Worthdamm 13-27 · 20457 Hamburg · Germany
Tel.: +49 40-78 11 5-0
Fax: +49 40-78 11 5-785
wax@de.sasol.com · www.sasolwax.com





Our product range encompasses more than 50 standard products, e. g.:

- *Various types of paraffin wax for grave lights and composition oil lights: We seek the optimum compatibility between numerous types of paraffin wax and fats, as well as oils of vegetable or animal origin in order to be able to offer suitably sophisticated, convenience blends.*
- *Different types of burner and tea light paraffin waxes with a low congealing point guaranteeing optimum burning down in containers and good processing characteristics, e. g. for spraying and pressing.*
- *A wide spectrum of requirement appropriate candle materials, adapted to the manufacturing processes of drawing, pressing, extruding, moulding and dipping.*
- *Wick waxes that exhibit high flexibility even at low temperatures.*
- *Dip coating and coating compounds able to achieve various decorative effects. Gloss, hardness, tangibility, dye solubility, as well as lacquer compatibility and viscosity are decisive characteristics here.*
- *Types of paraffin wax for glass jars and containers with good wall adhesion, a smooth surface and good combustion characteristics.*
- *Gel wax - with a crystal clear appearance and of the highest quality - tested by the independent analysis institute Ökometic GmbH.*
- *Stearic acid / fat / paraffin wax blends.*
- *Scenti Masterbatch - the fragrance for candles in solid form; matched to the specific requirements of scented candle manufacturing, available in various fragrances.*
- *Scenti Coloured Powder - coloured, scented paraffin wax powder specifically designed for an individual client or as a standard composition, excellent pressing and extrusion characteristics are emphasised in particular.*



Sasolwax

VaraGEL

Our products correspond to the RAL quality mark for candles.



Sasol Wax GmbH

Worthdamm 13-27 · 20457 Hamburg · Germany

Tel.: +49 40-78 11 5-0

Fax: +49 40-78 11 5-785

wax@de.sasol.com · www.sasolwax.com



Paraffin Waxes for the Candle Industry



Product	Congealing Point (°C)	Oil Content (%)	Needle Penetration 25 °C (0.1 mm)
	DIN ISO 2207 ASTM D 938	DIN ISO 2908 ASTM D 721	DIN 51579 ASTM D 1321
Paraffin Wax for Sanctuary Lights			
0155	54 – 56	0 – 1.2	21 – 26
5334	52 – 54	0 – 2.5	32 – 40
Paraffin Wax for moulded Grave Lights			
2936	48 – 52	1.5 – 4.0	40 – 70
6210 (oil lights)	35 – 40	–	100 – 140
Paraffin Wax for Drawing			
5405	53 – 55	0 – 0.5	20 – 25
5605	54 – 56	0 – 0.5	20 – 24
5805	58 – 60	0 – 0.5	19 – 23
5905	57 – 59	0 – 0.5	16 – 20
Paraffin Wax for Tea Lights			
0985	51 – 54	0 – 1.3	24 – 28
0986	50 – 53	0 – 1.5	22 – 26
0990	51 – 54	0 – 1.3	26 – 32
5203	52 – 54	0 – 0.5	16 – 20
8900 (for fragrance)	52 – 54	0 – 0.5	15 – 19
Paraffin Wax for Pressing			
5403	54 – 56	0 – 0.5	16 – 20
5603	56 – 58	0 – 0.5	15 – 19
5803	58 – 60	0 – 0.5	15 – 19
Paraffin Wax for Extrusion			
0716	56 – 58	0 – 0.8	14 – 18
1795	57 – 59	0 – 0.5	14 – 17
4126	58 – 61	0 – 0.5	16 – 19
5803	58 – 60	0 – 0.5	15 – 19
Paraffin Wax for Moulding			
0633	56 – 58	0 – 1.5	18 – 22
4109 (marble effect)	60 – 62	0 – 0.8	13 – 16
4110	60 – 62	0 – 0.5	13 – 16
5404	54 – 56	0 – 0.5	16 – 20
5544 (mottling)	58 – 63	0 – 3.0	18 – 22
5603	56 – 58	0 – 0.5	15 – 19
6039	58 – 60	0 – 0.5	15 – 19
Paraffin Wax for Moulding (with stearic acid)			
6034 (rotary moulding)	53 – 56	–	13 – 18
6243	55 – 57	–	14 – 19
Paraffin Wax for Dipping			
8461	57 – 60	0 – 0.75	13 – 17

We reserve the right to make changes to accord with further developments.

Sasol Wax GmbH

Worthdamm 13-27 · 20457 Hamburg · Germany

Tel.: +49 40-78 11 5-0

Fax: +49 40-78 11 5-785

wax@de.sasol.com · www.sasolwax.com



Products for the Candle Industry



Product	Congealing Point (°C)	Viscosity 100 °C (mm ² · s ⁻¹)	Needle Penetration 25 °C (0.1 mm)
	DIN ISO 2207 ASTM D 938	DIN 515672 ASTM D 445	DIN 51579 ASTM D 1321
Wick Wax			
6301 (standard)	68 – 70	7.0 – 8.0	14 – 17
6303 (very flexible)	62 – 65	8.0 – 10.0	16 – 20
8204 (hard)	66 – 70	5.0 – 7.0	10 – 14
8504 (flexible)	66 – 70	8.0 – 10.0	16 – 19
Overdipping Wax			
KTM 17 (standard)	60 – 62	5.0 – 6.0	13 – 16
KTM 19 (high viscosity)	59 – 62	12.0 – 15.0	12 – 14
KTM 21 (matt)	60 – 62	4.8 – 5.2	15 – 18
KTM 23 (standard)	60 – 62	5.0 – 6.0	12 – 16
KTM 24 (ice crystal)	50 – 52	–	6 – 8
KTM 40 (low melting)	54 – 56	4.7 – 5.7	12 – 17
Wax for Ornamental Candles, Reliefs			
0782	63 – 65	8.0 – 10.0	17 – 19
6660	67 – 70	8.0 – 10.0	15 – 18
8532	60 – 64	6.0 – 7.5	22 – 30
Paraffin Wax for Jar Filling			
6213 (≤ 4% fragrance)	44 – 48	4.0 – 5.0	70 – 100
6214 (> 4% fragrance)	48 – 52	4.0 – 6.0	50 – 70
6220	50 – 56*	5.0 – 6.0	100 – 120
6223	46 – 50	4.0 – 6.0	80 – 120
6277	46 – 50	–	90 – 120
Natural Wax			
VaraNat G	42 – 46	6.5 – 8.5	30 – 40
Additive			
VaraPlus 06	59 – 61	45 – 60	1 – 4
Gelwax			
6527	Drop Point Mettler °C 66 – 73	Viscosity (120 °C) 60 – 85	–

* Drop Point Mettler °C

We reserve the right to make changes to accord with further developments.

Sasol Wax GmbH

Worthdamm 13-27 · 20457 Hamburg · Germany

Tel.: +49 40-78 11 5-0

Fax: +49 40-78 11 5-785

wax@de.sasol.com · www.sasolwax.com

