

GTL FT SASOLWAX

for Inks, Paints, Coatings
and Adhesives



SASOL

Sasol Chemicals



About us

At Sasol Chemicals we innovate a better world and deliver long-term value to our customers, communities and society.

Our broad portfolio of high-value products plays an integral role in the creation of numerous solutions that benefit the lives of millions of people.

Thousands of companies around the world leverage our technology, world-class facilities, expertise and collaborative approach to tackle their challenges.

Additives, raw materials and compounds for Inks, Paints, Coatings and Adhesives

Sasol Chemicals is a global producer of innovative and high-performance solutions for the inks, paints, coatings and adhesives markets, offering fatty and oxo alcohols, alkyl phenols, glycol ethers, acetates, ketones, alcohols, polyethylene glycols, nonionic and anionic surfactants, paraffins, Gas-to-Liquid (GTL) Fischer-Tropsch (FT) waxes and acrylic monomers.

Our global network of research and development, technical customer support and regulatory experts helps to create new solutions designed to meet your specific formulation requirements. From the laboratory to production and regulatory registration to product launch, Sasol Chemicals is your partner every step of the way.



Sasol Chemicals is a market leader and specialist for innovative Gas-to-Liquid (GTL) Fischer-Tropsch (FT) wax technologies

Sasol's GTL FT waxes are synthetically produced by using natural gas as sustainable feed stock. Sasol is globally recognized as a commercial and technical pioneer of the Fischer-Tropsch process.

The following unique characteristics of Sasol's GTL FT waxes ensure ideal performance properties in a variety of inks, paints, coatings and adhesives applications:

- Consistent high quality, sulphur free, free from aromatics and heavy metals
- High degree of linearity and crystallinity
- Excellent thermal stability
- Very low surface energy
- Low viscosity when molten with Newtonian fluid behavior
- Distinct phase transition from the solid to liquid phases/temperature switch function



Various grades of Sasol's GTL FT waxes comply with the regulations of the USA Food and Drug Administration (FDA), the German Federal Institute for Risk Assessment (BfR) for food contact materials, and the Chinese GB National Food Safety Standards. Sasol Chemicals Africa is a certified ISO 9001, ISO 14001 and OHSAS 18001 supplier.

GTL FT SASOLWAX products are not classified as MOSH/MOHA compounds as they are not produced from

mineral oils. Additionally, GTL FT SASOLWAX products are not considered polymers by ECHA (European Chemicals Agency) and are not microplastic.

Sasol's GTL FT waxes are not expected to contain per- and polyfluoroalkyl substances (PFAS). PFAS are not intentionally added during our manufacturing processes.

SASOLWAX LC 100 Sasol's lower carbon emissions GTL FT SASOLWAX

Is it possible to improve your packaging manufacturing performance and reduce your carbon footprint – at the same time?

It is with **SASOLWAX LC 100** – developed specifically for the packaging and adhesives markets. **SASOLWAX LC 100** offers superior performance while achieving a 35 % reduction in product carbon footprint (PCF), thanks to Sasol Chemicals' innovative production process.

With **SASOLWAX LC 100**, packaging manufacturers can produce more high-quality boxes in less time with fewer raw materials while significantly reducing the PCF of their products – without the need for investments in new equipment.

That's because drop-in ready **SASOLWAX LC 100** provides the same exceptional properties and performance benefits as Sasol's industry benchmark **SASOLWAX H1**, including:

Smoother, thinner adhesive application, resulting in more box closures with less adhesives

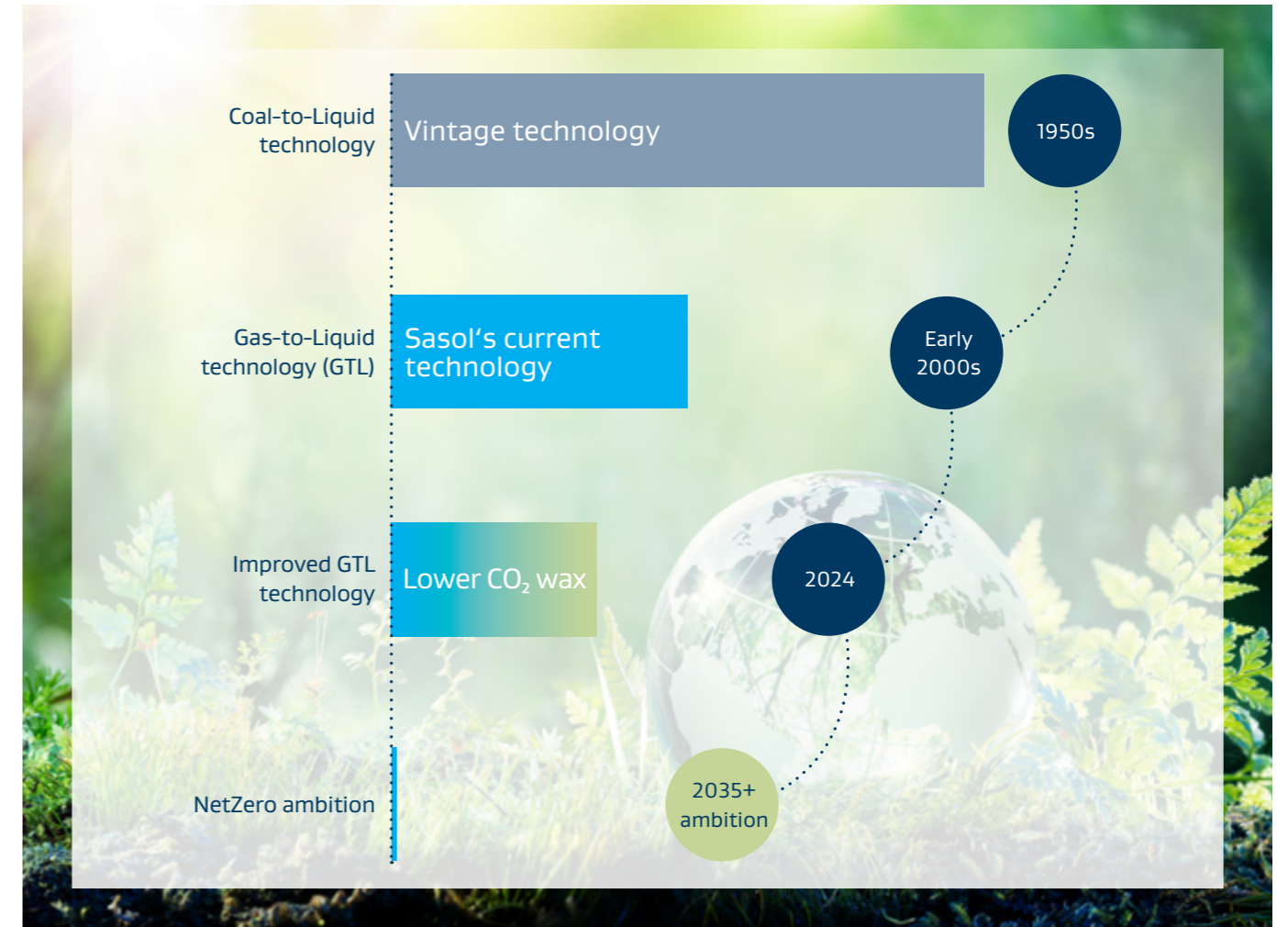
Enabling high-speed packaging lines due to fast set times

Improved durability and stability

Outstanding thermal stability, boosting operational efficiency for HMA manufacturers.

Sasol's model for calculating PCFs for its wax value chain has undergone a critical third-party review and complies with ISO 14067, an international standard that outlines the requirements and guidelines for quantifying the carbon footprint of products throughout their life cycle.

Sasol's pathway to NetZero emissions



Applications

Inks

Micronized waxes play a crucial role in improving the quality and performance of printing inks, providing benefits such as enhanced durability, improved transfer properties, and protection against abrasion and scuffing.

Sasol's micronized GTL FT waxes are manufactured by using spray tower technology or dry grinding processes.

They are attractive alternatives to polyethylene waxes in all kinds of printing inks. Highly sophisticated micronization technology enables Sasol to supply micronized GTL wax products with a sharp particle size distribution for water and solvent based formulations.

Depending on the film thickness of the final print, GTL FT SASOLWAX products with different particle sizes are available.

They are used in myriad printing technologies:

SASOLWAX products are used in myriad printing technologies:

- Offset printing
- Flexographic printing
- Gravure printing
- Screen printing

Hot melt adhesives

GTL FT SASOLWAX products have been successfully established in metallocene polyolefin copolymer and EVA-based hot melt adhesive formulations. Their crystallinity makes them the perfect choice to control open and set times. Sasol's GTL FT waxes enable the formulator to adjust the viscosity and optimize the rheological behavior of the adhesive formulation. Excellent thermal stability to avoid degradation and high temperature resistance make GTL FT SASOLWAX products suitable for many demanding applications. These waxes can also provide the right balance between cohesive and bond strength on one side and flexibility and elongation on the other side.

Paints and coatings

Sasol's GTL FT waxes are used as additives in coatings, interior and exterior paint formulations to improve the durability and performance of the coating. They improve properties such as mar and scratch resistance, water repellency, and surface smoothness, as well as provide protection against environmental factors such as UV radiation. GTL FT SASOLWAX products enhance the gloss and color (pigment orientation) of the coating and improve its resistance to abrasion. In addition, Sasol's GTL FT waxes can act as release agents, preventing blocking between the coated surface and other materials. They are in particular performance additives in formulations for wood, can, powder and automotive coatings.



Hot Melt Adhesives



Inks

Paints and coatings



SASOLWAX products – typical properties

Standard GTL FT waxes

SASOLWAX	Congealing point (°C)	Drop melting point (°C)	Penetration at 25 °C (1/10 mm)	Color	Supply form
C80M	76 – 80	85	6 – 12	Off white	Pastilles
C80	80 – 85	88	4 – 9	White	Pastilles
H1	96 – 100	112	<1	White	Pastilles
H1N8	96 – 100	112	<1	White	Coarse powder
H8	96 – 100	112	3 max.	Off white	Pastilles
C105	102 – 108	117	<1	White	Pastilles
H105	102 – 108	117	<1	White	Coarse powder

Lower carbon emissions GTL FT wax

SASOLWAX	Congealing point (°C)	Drop melting point (°C)	Penetration at 25 °C (1/10 mm)	Color	Supply form
LC100	96 – 100	112	<1	White	Micro pastilles

Oxidized GTL FT wax

SASOLWAX	Congealing point (°C)	Drop melting point (°C)	Penetration at 25 °C (1/10 mm)	Color	Acid value (mg KOH/g)	Saponification value (mg KOH/g)	Supply form
A1	76 – 79	79 – 82	8 – 14	Off white	27 – 29	50 – 60	Coarse powder

Oxidized and saponified GTL FT waxes

SASOLWAX	Congealing point (°C)	Drop melting point (°C)	Penetration at 25 °C (1/10 mm)	Color	Acid value (mg KOH/g)	Saponification value (mg KOH/g)	Supply form
A2	89	107	< 4	Light yellow	9 – 13	27 – 37	Coarse powder
A859	99	112	< 2	Off white	3 – 7	14 – 28	Coarse powder

Micronized GTL FT waxes


SASOLWAX	Drop melting point (°C)	Penetration at 25 °C (1/10 mm)	Particle size D50 (µm)	Particle size D90 (µm)
Sprayed waxes				
Spray 30	112	<1	7 max.	14 max.
Spray 105	117	<1	7 max.	25 max.
Ground waxes				
Spray C80 G	88	4 – 8	6 – 8	≤18
Spray 30 G-EF	112	<1	4 – 5	≤10
Spray 30 G	112	<1	5 – 7	≤14
Spray 30 G-M	112	<1	9 – 11	≤26
Spray 30 G-L	112	<1	11 – 13	≤31
Spray 105 G-EF	117	<1	4 – 5	≤10
Spray 105 G	117	<1	5 – 7	≤14
H1N4 G	112	<1	6 – 8	≤18


Micronized functionalized GTL FT waxes

SASOLWAX	Drop melting point (°C)	Penetration at 25 °C (1/10 mm)	Acid value (mg KOH/g)	Saponification value (mg KOH/g)	Particle size D50 (µm)	Particle size D90 (µm)
Ground waxes						
Aqua 30 G-EF	112	< 2	3 – 7	14 – 28	4 – 5.5	≤10
Aqua 30 G	112	< 2	3 – 7	14 – 28	5 – 7	≤14

SASOL CHEMICALS Solutions for sustainability

Extending our customized high performance product lines through new sustainable feedstock options

 Following ISO norms and TfS guidelines to calculate product carbon footprints

 Renewable fatty alcohols; RSPO-MB certified

 Product innovations reducing greenhouse gas emissions

 Biosurfactant commercialization

 Renewable RSPO-MB/ISCC PLUS certified emulsifiers

 Global EcoVadis certified production sites



Our global footprint

● Sasol Chemicals' business locations, e.g. offices, production sites, JVs, laboratories, etc.



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