Sasolwax H1 Fischer-Tropsch Hard Wax in Hot Melt Adhesives

Sasol's Fischer-Tropsch hard waxes are synthetically produced by using gas-to-liquids (GTL) technology, in which Sasol is globally recognised as a commercial and technical pioneer. The GTL process uses natural gas to produce premium Fischer-Tropsch hard waxes.

As a prime quality Fischer-Tropsch hard wax, **Sasolwax H1** has been successfully established in EVA-based and metallocene polyolefin copolymer hot melt adhesive formulations. **Sasolwax H1**, the market standard for FT hard wax, provides a superior balance in adhesive performance and temperature stability. The linear molecule structure of **Sasolwax H1** gives a hot melt adhesive the unique characteristics of low viscosity combined with high crystallinity, which ensures ideal performance properties in hot melt adhesives:

Feature	Advantage
Low viscosity	Excellent processability during adhesive production Excellent substrate wetting High line speed Reduced energy consumption
Low surface energy	Excellent substrate wetting
High crystallinity	Fast set time Balanced flexibility and elongation properties Good cohesive strength Superb green strength
High congealing point	High blocking point Excellent compatibility with polymer and resin Superior heat resistance properties Excellent thermal and colour stability
Linear molecular structure	Excellent compatibility with all major groups of polymers and resins Excellent thermal stability

Being highly compatible with typically used resins, EVA and metallocene polyolefin copolymers, **Sasolwax H1** is ideally suited to the requirements of modern hot melt adhesives, particularly in packaging applications.

Available Forms of Supply

SUPPLY FORMS	20 KG BAG	700 KG BAG
Coarse powder	●	●
Pastilles	●	●

WAX PROPERTIES	UNITS	TEST METHOD	SPECIFICATION	TYPICAL VALUES
Congealing point	°C (°F)	ASTM D 938	96 – 100 (205 – 212)	97 (207)
Drop melting point	°C (°F)	ASTM D 3954	–	112 (234)
Brookfield viscosity at 135°C (275 °F)	cP	Sasol 1010	6 – 10	8
Penetration at 25 °C (77 °F)	0.1 mm	ASTM D 1321	1 max	1
Penetration at 65 °C (149 °F)	0.1 mm	ASTM D 1321	20 max	18
Colour	Saybolt	Sasol 2000	+ 15 min	+ 22
Oil content (MEK Solubles)	mass %	ASTM D 721	–	< 0.2
Molecular weight	Dalton	–	–	880

The specifications of **Sasolwax H1** are secured through our highly developed production technology. The management system including production is certified according to ISO 9001, ISO 14001 and OHSAS 18001.

Sasolwax H1 complies with the following regulations:

- **FDA CFR 21:**

  §172.615 "Chewing Gum Base"

  §175.105 "Adhesives"

  §175.250 "Paraffin (synthetic)"

  §175.300 "Resinous and polymeric coatings"

  §175.320 "Resinous and polymeric coatings for polyolefin films"

  §176.170 "Components of paper and paperboard in contact with aqueous and fatty foods"

  §176.180 "Components of paper and paperboard in contact with dry food"

  §177.1200 "Cellophane"

  §177.1390 "Laminate structures for use at temperatures of 250 °F and above"

- **Commission Regulation (EU) No 10/2011** on plastic materials and articles intended to come into contact with food: product is in compliance with the specification of Ref. No. 95859 Waxes, refined, derived from petroleum based or synthetic hydrocarbon feedstocks, high viscosity.
- **Recommendation of the BfR** (German Federal Institute for Risk Assessment) XXV, Part C, (Synthetische Hartparaffine)
- **European specifications for food additives according to E905**

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