



USOCORE[®]

Vegetable Waxes For Coating Of Paper

Historically, paper and cardboard have been treated with waxes of different types to give them a finish according to the function they should perform. We focus mainly on two sectors: food (fruits – vegetables – meat and fish – processed foods) and cosmetics / pharma.

For different purposes and depending on the type of packaging manufactured, producers need:

- Protection against direct contact with water
- Protection against direct contact with oils and fats
- Protection against direct contact with moisture
- Shine / Gloss to embellish a quality wrapping

Simultaneously, the automation of the processes in the manufacture of elements for packaging has forced to develop different adhesive components derived from waxes, to apply in heated processes:

- Hotmelts for the closing of boxes
- Coupling waxes for complex paper/polystyrene , paper / aluminium and paper/paper
- Hotmelts to seal yogurt stoppers

For all these processes, USOCORE has developed specific formulations to respond to the demands of our customers.

In the past, all coating waxes and adhesives have been formulated based on paraffin and waxes of mineral origin, with the addition of specific polymers to fulfill the functions for which they were designed.

However, the imposition of new environmental directives and laws, as well the growing environmental awareness in general, are leading to new environmental product formulations, offering:

1. The non presence of mineral oil contents that can be transmitted tot he final products (MOSH/MOAH)
2. Compostability, that is, the guarantee that contrary to what happens with mineral derivates, all containers and packaging treated with this type of vegetable waxes will be compostable like the leaves of a tree. For all these reasons, a new family of products based on vegetable waxes was developped. USOCORE has a broad range of vegetable waxes as equivalent to conventional waxes to respond to current needs of industries – households & legislations.



Overview Vegetable Waxes For Food Paper / Carton:

	Viscosity	Consumption	Temperature application curtain / roller	Air Barrier	Resistance to water & fats	Gloss for soaps, cosmetics packaging
Z-441	very low	low (3-7 gr/m ²)	moderate (55-90 °C)	yes	low	low
Z 431	low	moderate (6-9 gr/m ²)	high (70-115°C)	yes	moderate	low
Z435T	low	Low (3-7 gr/m ²)	moderate (55-90°C)	yes	very high	moderate
Z 433	low	low (3-7 gr/m ²)	high (70-115°C)	yes	high	moderate
Z 436	low	moderate (6-10gr/m ²)	high (70-115°C)	yes	high	high
Z 437	high	high (7-15gr/m ²)	moderate (55-90°C)	yes	high	high

All above vegetable waxes are MOSH / MOAH free , compostable , certified ok-Compost & ok-Compost Home.

Caracateristics	ASTM	Usocoat Z 441	Usocoat Z 431	Usocoat Z 435 T	Usocoat Z 433	Usocoat Z 436	Usocoat Z 437
Congealing Point, °C	938	48	57	79	83	88	78
Drop Point, °C	127	61	70	88	96	95	84
Saybolt Colour	156	-8	-8	-5	-8	-14	-14
Penetration, 1/10 mm	1321	4	4	3	3	4	3
Kin. Viscosity, 100°C, cSt	445	10	12	49	240	11	27

Other flyers available for:

- Vegetable waxes for coating corrugated cardboard
- Vegetable hotmelt & adhesives for paper and packaging
- Vegetable adhesives for yoghurt and dairy packaging
- Vegetable adhesives different closure times (f.e. closure of yoghurt cups)