



## Health Care Waxes

**The cleanest waxes do the most beautiful work.**



Great brands never change. And because Sonneborn processes our waxes to absolute purity and stability, their performance never changes either — batch after batch, year after year. Absolutely predictable performance is what keeps great brands great forever. **Absolute know-how. Absolutely Sonneborn.**

### KEY FEATURES AND BENEFITS

- Ultra-pure and ultra-white grades available due to a unique two-stage hydrogenation process
- Products meet or exceed most strict regulatory standards, including FDA and Colipa
- Count on absolute stability and consistency, batch after batch

### COMMON APPLICATIONS

Market	Application	Recommended Products	Key Benefits
Pharma	Ointments	W-445, 180-W, W-445-H, 180MH	Carry medication; harden or lubricate; rheology modifier; improve oil-binding properties; protect against moisture
	Cold cream	W-445, 180-W, W-445-H, 180MH, W-835	
Medical	Tablet coatings	180MH, SB1322	Lubricant and protective coating
	Dental floss	W-445, W-445-H, X123AH, X145AH, 180-W	Provide smooth glide for dental floss and comfort for orthodontic protection
	Orthodontic wax		
Personal Care	Hair styling	SB3742, W-445, W445H	Lightweight structure with natural hold
	Lip balm	W-835, W445, W-445-H	Provide structure, adhesion and protection
	Lip stick		

### ABSOLUTE INVENTIVENESS

Beyond our large portfolio of health care products, Sonneborn can engineer a wide variety of base waxes and products tailor-made for your needs. Please let us know if you require a specific product different than our standard. Our experience and knowledge enable us to engineer the most advanced microcrystalline and multiwaxes in the world across a wide range of specifications.

#### ABSOLUTE VERSATILITY, ABSOLUTE COMPLIANCE

#### TYPICAL MICROCRYSTALLINE AND MULTIWAX PROPERTIES

Multiwax Product	Melting Point ASTM-D127		Needle Penetration dmm @ 77°F (25°C) ASTM D-1321	Color	Viscosity @ 212°F (100°C)		Congealing Point ASTM D-938	Production Location
	°F	°C			ASTM D-2161	ASTM D-445		
180-W	175–188	79–87	15–22	+16 Min. <sup>c</sup>	75 Min.	14.3 Min.	75–80	US
W-445	170–180	77–82	25–35	+16 Min. <sup>c</sup>	75 Min.	14.3 Min.	71–76.5	US
W-835	165–175	74–79	60–80	+16 Min. <sup>c</sup>	75 Min.	14.3 Min.	68–74	US
180MH	180–188	82–87	15–20	2.0 Max.	73 Min.	13 Min.	74–79	NL
MW250	170–182	77–83	20–25	2.0 Max.	73 Min.	13 Min.	72–77	NL
W445H Extra White	168–180	76–82	25–35	2.0 Max.	73 Min.	13 Min.	71–76	NL
ML445H	175–183	79–84	25–32	2.0 Max.	73 Min.	13 Min.	71–76	NL
SB3742	172–182	78–83	37–42	2.0 Max.	73 Min.	13 Min.	69–74	NL
X145AH	158–167	70–75	35–45	0.5 Max.	73 Min.	13 Min.	65–70	NL
X123AH	158–167	70–75	20–35	0.5 Max.	73 Min.	13 Min.	65–70	NL

<sup>c</sup> ASTM D-156 (Saybolt color)

#### ABSOLUTE COMPLIANCE

Inherently ultra-pure, Sonneborn Multiwaxes® meet or exceed every global standard for pharmaceutical and food-grade waxes, making it the ideal wax base for medical and personal care products.

Products listed above are compliant to:

- FDA requirements CFR 172.886 and 178.3710
- Recommendations of Colipa
- Products manufactured in the US and The Netherlands meet the requirements of the European Directive for plastic materials and articles intended to come into contact with food:
  - ✓ COMMISSION REGULATION (EC) No 1935/2004 and No 2032/2006
  - ✓ COMMISSION REGULATION (EU) No 10/2011 (including migration limits) and No 231/2012, citing specifications for food additives listed in Annexes II and III to Regulation (EC) No 1333/2008 (E 905)
- Multiwaxes manufactured in the United States meet the requirements for Microcrystalline Wax NF, as per the National Formulary (current revision)