KOSTER KEUNEN

THE SCIENCE OF WAX, WITHOUT THE WEIGHT OF PETROLEUM

At Koster Keunen, we believe in evolving cosmetic wax technology through thoughtful innovation and responsible chemistry. SynKos™ M-1063 is our latest advancement in the SynKos series—engineered specifically to replace microcrystalline wax in personal care. Designed without petroleum, BHT, or PAHs, M-1063 delivers functional equivalency and comparable texture in standard formulations—without compromising performance.

Where traditional microcrystalline waxes are derived from fossil sources, SynKos M-1063 offers a cleaner, more sustainable option while meeting the technical demands of emulsions, lip products, and anhydrous systems.

WHY CHOOSE SYNKOS™ M-1063?

SynKos Waxes are used as gelling agents, thickeners, viscosity modifiers, and barriers. They are also used to modify hardness, slip and melting point. These products have compatibility with all cosmetic systems, including the following: vegetable oils, esters, and low viscosity fluids like cyclomethicone and isododecane. Look for our gel data on the following cosmetic fluids to get the gel that is best for each system.

- For brands removing petrochemical ingredients
- For R&D teams needing microcrystalline-like behavior with a clean INCI
- For companies focused on sustainability and safety without losing performance

FORMULATION GUIDELINES

SynKos M-1063 is used as a thickener, viscosity modifier and barrier. It is compatible with all cosmetic systems, including vegetable oils, esters and low viscosity fluids like cyclomethicone and isododecane. In addition, SynKos M-1063 offers a non-petroleum INCI and chemistry pathway, delivering a high-performance alternative to microcrystalline wax for today's more sustainable formulation goals.

REGULATORY

SynKos M-1063 was developed to meet the growing demand for globally compliant ingredients without sacrificing performance. Its regulatory profile provides formulators with confidence across international markets.

INCI Name: Synthetic Wax

Manufactured: Watertown, Connecticut, USA

Does Not Contain: BHT, PAHs, or Heavy Metals

- REACH-compliant, polymer-exempt
- Not classified as a mineral hydrocarbon

PRODUCT BENEFITS

- **Functional Match for Microcrystalline Wax**
  Similar hardness, texture, and sensory profile in emulsions, anhydrous formulas, and color cosmetics.
- **Clean Formulation Advantage**
  Free from petroleum, PAHs, BHT, and heavy metals—ideal for clean beauty and global regulatory compliance.
- **Flexible Chemistry**
  Not a structuring wax—acts as a waxy emollient and rheology modifier. Can be blended with other waxes to fine-tune formula properties.
- **Made in the USA**
  Responsibly manufactured in Watertown, Connecticut, under stringent quality control.

Formulators report virtually no measurable or textural differences.

SynKos M-1063 may be used as a direct substitute in many formulas.

PERFORMANCE COMPARISON

SynKos M-1063 has been tested as a direct one-to-one replacement for microcrystalline wax* in a variety of personal care formulations. In both existing systems and newly developed formulas, full substitution with M-1063 resulted in stable, high-performing products. The chart below highlights the minor differences observed, with comparable texture and functionality across all applications. As every formula is unique, in-house testing is recommended to ensure optimal performance.

APPLICATION	TEST	MICROCRYSTALLINE WAX*	SYNKOS M-1063	DIFFERENCE
Lip Balm	Penetration	52.0	54.0	Slightly softer feel
Lipstick	Penetration	50.0	49.0	Nearly identical texture
Emulsion	Viscosity	5051 cPs	5351 cPs	Slightly thicker texture

*All performance comparisons were tested against the most widely used microcrystalline wax (Koster Keunen Microcrystalline 170/180 Wax #140), with the following specifications: Melting Point (USP 741): 170–180°F; Penetration (ASTM D1321): 25–35

RECOMMENDED APPLICATIONS

- Lip balms, lipsticks, and stick formats
- Anhydrous sticks, ointments, balms and salves
- Emulsions (lotions, creams, butters)
- Color cosmetics requiring richness and flexibility

KOSTER KEUNEN

Everyday Kiss Formula: # 1/25-148/858/10093-2

FEATURES

- Moisture rich lip balm with good payoff
- Mass market, unisex, and vegan
- Stable under high heat and humidity conditions

Color Cosmetics

Anhydrous

Traditional Ingredients

Vegan

SynKos 2050
Synthetic wax that increases melt point and provides hard structure in anhydrous formulas, mimics the properties of medium melt paraffins, ozokerites, polyethylenes. Economical, versatile structurant.

Synthetic Candelilla
Wax blend designed to mimic the properties of natural candelilla wax. Hard and brittle, provies structure and gloss. Cost effective alternative to candelilla wax. Usage level 1-20%.

Synkos M-1063
Synthetic wax that increases melt point and acts as a plasticizer in anhydrous formulas. Mimics the properties of higher melt point microcrystalline waxes. BHT free.

Ingredient Trade Name	INCI Name	%
Phase A		
Synkos 2050	**Synthetic Wax**	**12.0**
Synthetic Candelilla	**Synthetic Beeswax, Synthetic Wax, Stearic Acid**	**14.0**
Synkos M-1063	**Synthetic Wax**	**5.0**
High Oleic Sunflower Oil	Helianthus Annuus (Sunflower) Seed Oil	29.0
Jeechem CTG	Caprylic/Capric Triglyceride	33.2
Dermol IPP	Isopropyl Palmitate	7.0

PROCEDURE

- Combine all ingredients and melt with low mixing until homogeneous, heating to 85– 90°C.
- Pour into appropriate containers at about 80 °C.
- Allow to cool to room temperature.

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