KOSTER KEUNEN



INTRODUCTION

The **SynKos ”O” Wax Series** is comprised of white, synthetic waxes with unique gelling and texturing capabilities. SynKos waxes are synthetic hydrocarbon polymers manufactured by GTL (gas-to-liquid) technology from natural gas. They can function like petroleum-based hydrocarbons, while being more consistent and offering a lower cost.

FORMULATION GUIDELINES

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.

- C12-15 Alkyl Benzoate
- Caprylic Capric Triglycerides
- Castor Oil
- Cyclopentasiloxane
- Isododecane
- Isononyl Isononanoate
- Isopropyl Palmitate
- Mineral Oil
- Sunflower Oil

REGULATORY

SynKos Waxes offer the formulator another choice of chemistry and INCI designation from both petrochemical waxes and polyethylene.

INCI Name:	Synthetic Wax
Manufactured:	Watertown, Connecticut, USA
Does Not Contain:	BHT, Heavy Metals, or PAH's.

SynKos is REACH polymer exempt, not restricted by COLIPA requirements and not a mineral hydrocarbon.



SYNKOS O-1070

Wax No. 10089

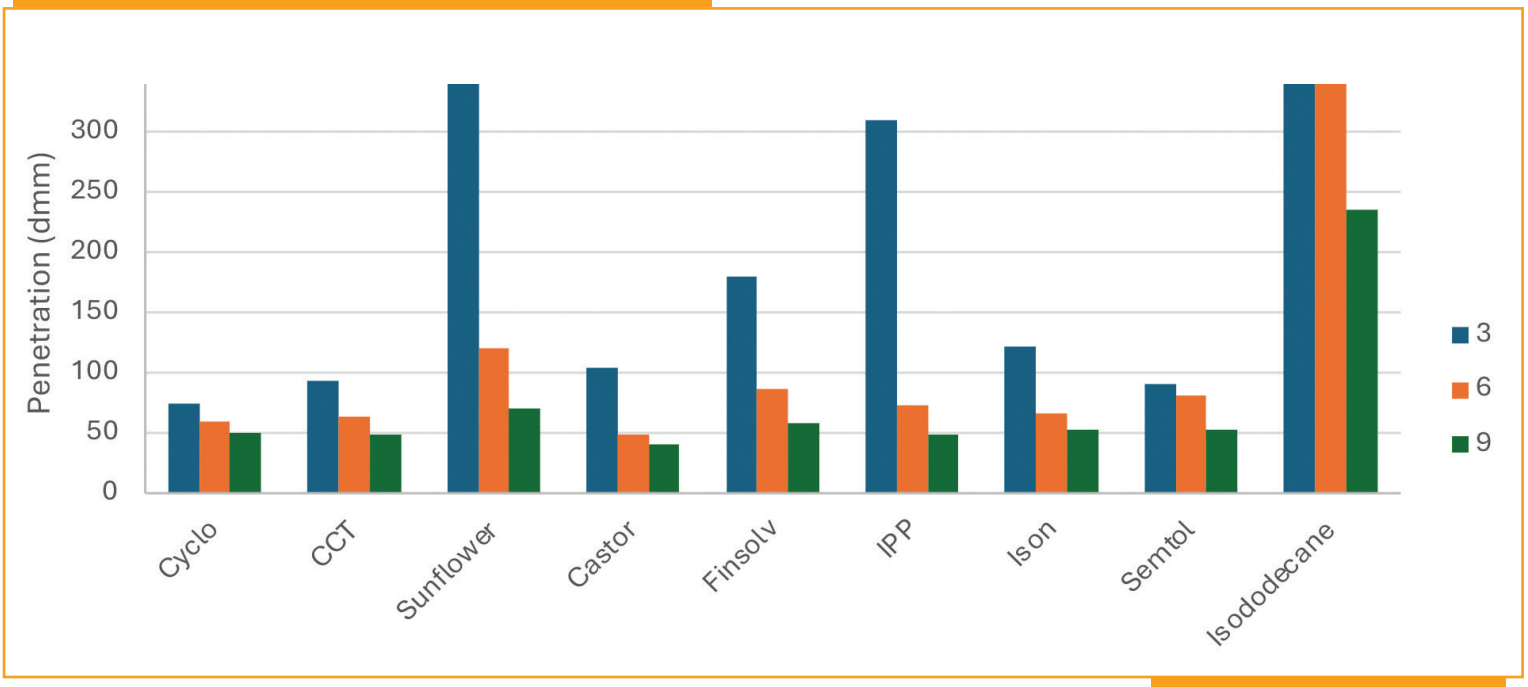
Benefit Overview

- Structurant
- Designed to replace Ozokerites
- NO BHT, NO PAH's

Gel Strength & Congeal Points

Gel data is provided to show the strength of the gel formed and measured via ¼ cone penetration. The lower the cone penetration, the harder the gel structure is. For example, a stick formula could have a penetration reading of 20-50 dmm, while a balm or pot balm would register around 70-140 dmm. Congeal information is used to understand how the gel solidifies. By combining the gel data with congeal temperature data, formulators can better predict and understand the type of gel and texture they can expect on the bench.

SYNKOS O-1070 WAX GEL STRENGTH



Congeals (°F)

SYNKOS O-1070%

	Cyclo	CCT	Sunflower	Castor	Finsolv	IPP	Ison	Semtol	Isododecane
3% wax	150	137.0	136.0	169.0	119.0	118.0	119.0	122.0	*
6% wax	160	146.0	145.0	164.0	131.0	127.0	128.0	133.0	*
9% wax	168	150.0	149.0	152.0	137.0	133.0	134.0	137.0	155.0

* All Congeal Points were tested. Missing data points denotes weak gel or liquid.

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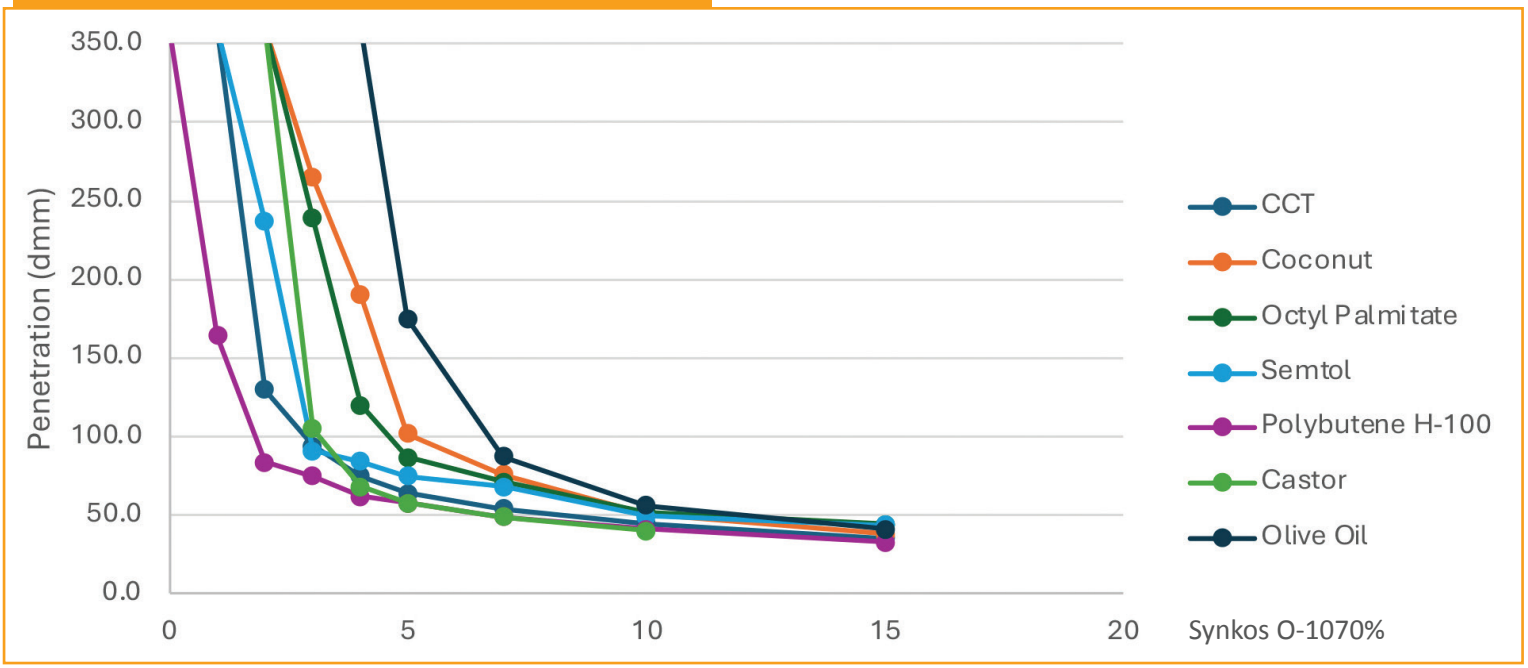
Comparing Gel Strengths

Use these charts to understand the basic gel strength of SynKos O 1070 and how it compares to Ozokerite.

SYNKOS O-1070 WAX GEL STRENGTH



OZOKERITE 175 WAX GEL STRENGTH

