

TOA KASEI CO.,LTD.
Since 1913



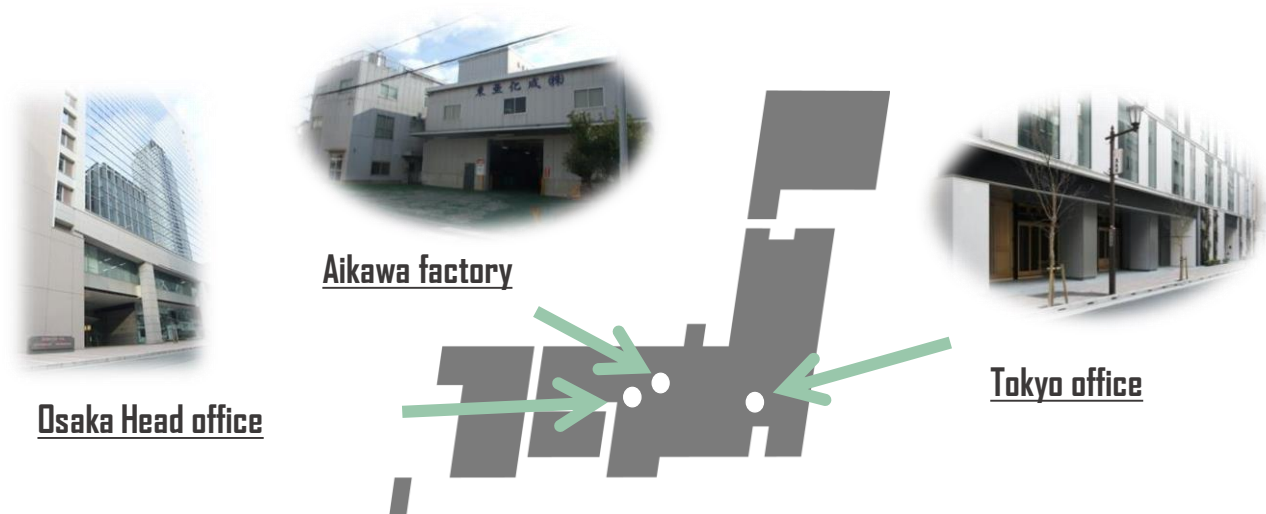
Product Catalogue

Company profile

Who we are

Toa Kasei is an innovative natural wax manufacturer in Japan. Since its foundation in 1913, Toa Kasei has been focusing on providing high quality of natural waxes to contribute to the development of new technologies on general industry especially for the personal care field.

We will respond your demands with more than 100 years of experience so that could create variety value in various fields.



History

- | | |
|------|--|
| 1913 | Opened joint-stock company "Matsunami sho-ten" |
| 1952 | Established "TOA KASEI Co.,Ltd." (capital;2 million JPY) |
| 1993 | Opened Tokyo branch |
| 2000 | Established Aikawa factory |
| 2007 | Passed ISO Certification 14001 |
| 2012 | Passed ISO Certification 9001 |
| 2013 | Our Centennial anniversary |

TOWAX (Toa Kasei's Natural Wax)

Toa Kasei provides high quality of Natural waxes produced by selective raw materials



Main products

Carnauba Wax

Bees Wax

Candellia Wax

Sunflower Wax

Rice Wax

Rose Wax

About Aikawa factory



Location : Aikawa area, Osaka

Establishment : 2000

Certification : ISO14001 , ISO9001

Production capacity : 1,200 tons/year

Main product : Natural waxes (Flake, Powder, Block types)

< Main equipment list for Quality Control >

- Differential Scanning Calorimetry (DSC)
- Thermogravimetry/Differential Thermal Analysis (TG/DTA)
- Gas Chromatography (GC)
- UV visible spectrophotometer
- Laser Scattering Particle Size Distribution Analyzer
- Hardness Analyzer
- Penetrometer

... and many types of equipments are using for the quality control.



About natural wax

What is different?

Between general natural wax and **TOWAX**

Most of Natural Waxes are contained below three components



Wax include
4 components

- Ester waxes
- Free fatty acids
- Free alcohols
- Hydrocarbons

- Candelilla include 15~18%
- Carnauba include 3~4%

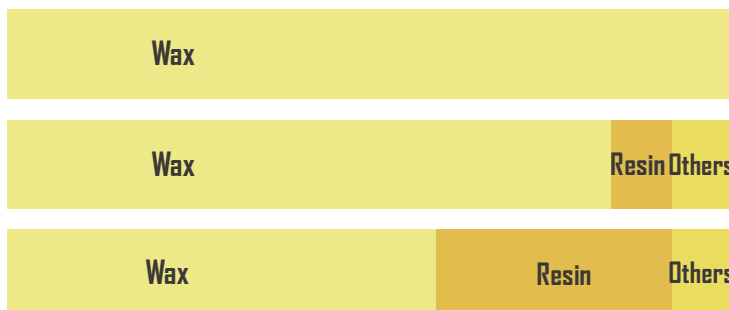
Other waxes do not contain Resin

Toa Kasei controls the quality by using the technologies and know-how as below

< Main technologies >

- Blending: Uniform the quality
- Purification : Enhance performance
- Separation : Create suitable waxes for each application

< Applications of separation technology on Carnauba wax>



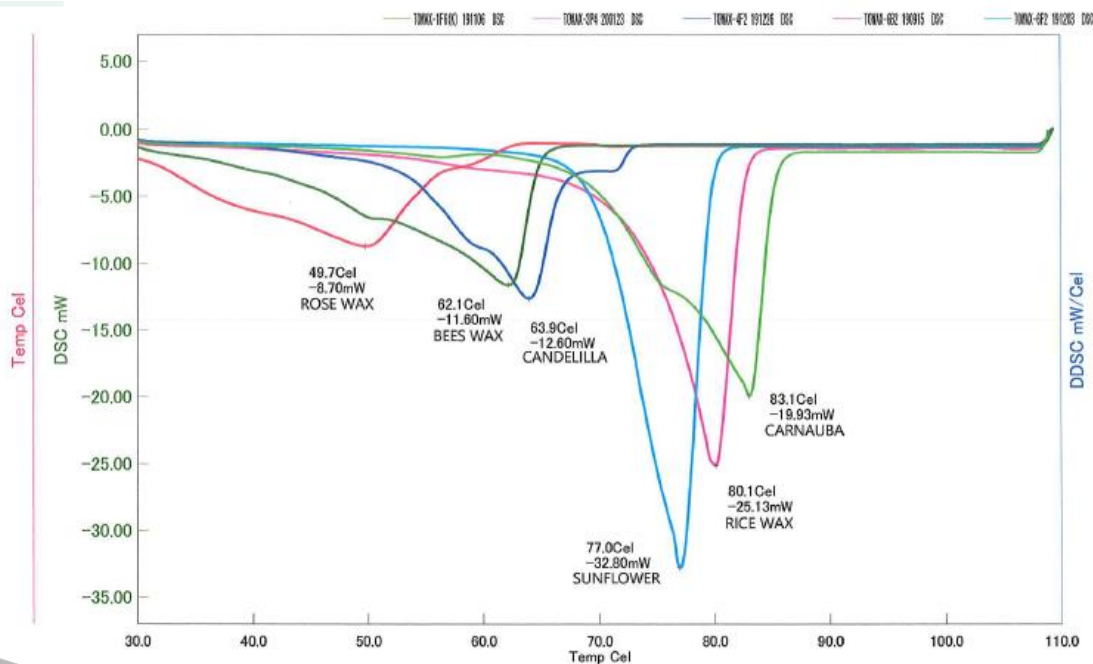
➤➤➤ Toa Kasei solves your problem.

The characteristic of each natural waxes

Component of natural waxes

	Carnauba wax	Candelilla wax	Rice wax	Bees wax	Sunflower wax	Rose wax
Ester	80~85% C ₄₈ ~C ₆₄ ALCOHOL C ₂₀ ~C ₃₄ [Mainly C ₃₀ •C ₃₂ •C ₃₄ C ₃₂ is about 50%~60%] FATTY ACID C ₁₄ ~C ₃₄ [Mainly C ₂₀ •C ₂₂ •C ₂₄ •C ₂₆ •C ₂₈] Good emulsifying property due to 30~35% of Hydroxy ester	24~30% C ₄₂ ~C ₅₆ ALCOHOL C ₃₀ •C ₃₂ •C ₃₄ FATTY ACID C ₁₆ ~C ₃₄ [Mainly C ₂₀ •C ₃₂ •C ₃₃ •C ₃₄]	93~97% ALCOHOL C ₂₂ ~C ₃₆ [Mainly C ₂₆ •C ₂₈ •C ₃₀] FATTY ACID C ₁₆ ~C ₃₄ [Mainly C ₂₂ •C ₂₄ •C ₂₆ The amount of C ₂₈ •C ₃₀ •C ₃₂ is small]	(High acid value) 67~72% (Low acid value) 68~75% ALCOHOL C ₂₄ ~C ₃₄ FATTY ACID C ₁₆ ~C ₁₈ [C ₁₆ is about 82~94%]	97~99% C ₄₂ ~C ₆₂	Approx. 35% C ₃₈ ~C ₅₂
Free fatty acid	3~4% C ₁₆ ~C ₃₂ [Mainly C ₂₀ •C ₂₆ •C ₂₈ •C ₃₀]	10~20% C ₂₀ ~C ₃₅ [Almost C ₃₀ •C ₃₂ •C ₃₄]	4~7% C ₁₆ •C ₁₈ •C _{18:1} •C _{18:3} [Mainly C ₁₆]	(High acid value) 13~16% C ₁₆ ~C ₃₂ Mainly C ₂₄ (Low acid value) 5~9% C ₁₆ ~C ₃₄ Mainly C ₃₂	1~3%	
Free alcohol	10~12% C ₁₆ ~C ₃₂	10~15% C ₂₆ ~C ₃₄ [Mainly C ₂₈ ~C ₃₂]		1~2% C ₂₄ ~C ₃₂ [Mainly C ₃₀]		
Hydrocarbon	1~3% C ₂₀ ~C ₃₃ [Mainly C ₂₇ •C ₂₉ •C ₃₁]	40~45% C ₂₈ ~C ₃₃ [About 70% is C ₃₁]		(High acid value) 10~14% C ₂₁ ~C ₃₅ (Low acid value) 16~21% C ₂₃ ~C ₃₅		Approx. 65% C ₁₇ ~C ₃₃
ETC	Resin 3~4% Lactone 3~5%	Resin 15~18%	Phospholipid Squalene	(Low acid value) About 4% of Glyceride (C ₁₄ •C ₁₆ •C ₁₈)		

DSC Chart



Carnauba Wax

INCI name : Copernicia Cerifera (Carnauba) Wax

Chinese INCI : 巴西棕榈树 (COPERNICIA CERIFERA) 蜡

Origin : Brazil

Carnauba wax is isolated from leaves from *Copernicia cerifera* that is the palm family tree. *Copernicia cerifera* is grown in northern Brazil, Argentine and Paraguay which are arid zone. Since it grows slow, it takes about 15 years to obtain wax. 300g of Carnauba wax is obtained from 1 three. The high quality of carnauba wax is from a tip of leaves, and it is 20% in total wax quantity.

Products line-up

Trade Name	Form	Packing size	Characteristic	Application	Dosage(%) in Formulation	Function in formulation	Melting Point (°C.)	Resin (%)
TOWAX-1F3	Flake	20kg	De-resin product / Could solidify the low viscosity of liquid paraffin	Emulsion Liquid foundation Lip stick Powder foundation Hair wax	1 - 10	Emollint Thickner	80-86	Less than 1%
TOWAX-1B4	Block	5kg	High resin product	Mascara	1 - 3	Film former	62~74	approx.95%
TOWAX-1F6	Flake	20kg	Stable solidification effect with liquid paraffin	Lip stick	1 - 10	Thickner	80-86	approx.5%
TOWAX-1F12	Flake	20kg	High-resin product / High viscosity	Mascara Eye liner Hair Wax	1 - 5	Film former	80-86	approx.10%
TOWAX-1PF	Pellets	20kg	Food additives grade	General cosmetics	1 - 10	Emollint Thickner	80-86	approx.5%
TOWAX-131	Powder	20kg	Spherical powder	Cleansing foam Body wash	1 - 10	Scrub	80-86	approx.5%

Candellila Wax

INCI name : Euphorbia Cerifera (Candelilla) Wax

Chinese INCI :小烛树 (EUPHORBIA CERIFERA) 蜡

Origin : Mexico

Candellia wax is obtained from *Euphorbia cerifera* and it grows in Mexico where is 1000 – 2000 altitude. *Euphorbia cerifera* produces candellia wax to protect itself from severe condition, such as temperature changing and arid climate.

The quality is strictly controlled as well as its condition of cultivation and harvest. The content of candellia wax is 2% in the plant and candellia wax is consist of esters of fatty acids, free fatty acids, high alcohols and hydrocarbons. It is known that 1,000 pieces plant is necessary to obtain 13kg of candellia wax.

TOA KASEI's candellia wax is complied with CITES standard.

Products line-up

Trade Name	Form	Packing size	Characteristic	Application	Dosage(%) in Formulation	Function in formulation	Melting Point (°C)	Resin (%)
TOWAX-4F2	Flake	20kg	Good solidification	Emulsion Liquid foundation Lip stick Powder foundation Hair wax	1 - 10	Emollint Thickner	68-73	approx.25%

Product introduction

Rice Wax

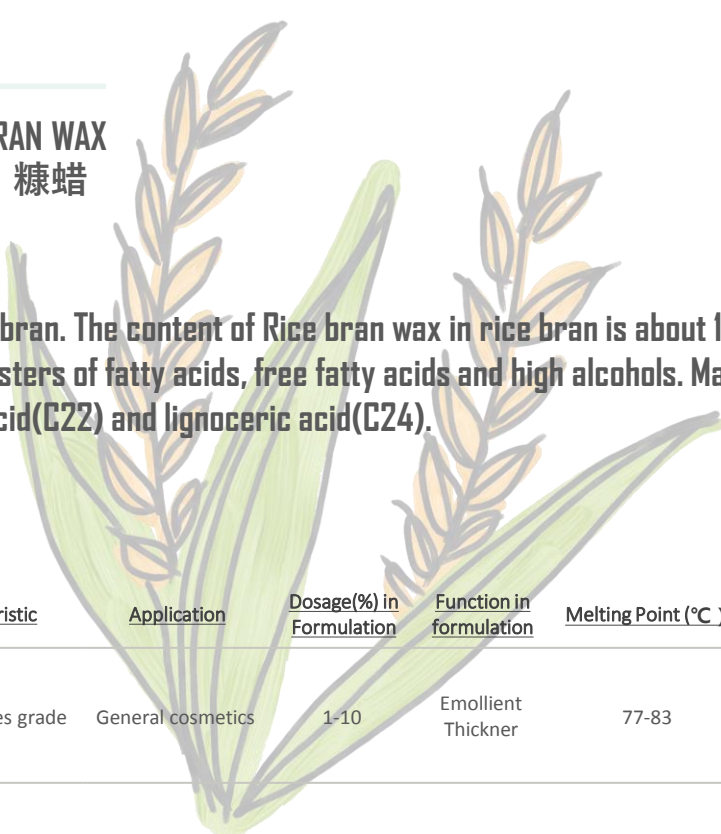
INCI name : DRYZA SATIVA (RICE) BRAN WAX

Chinese INCI : 稻 (DRYZA SATIVA) 糠蜡

Origin : Japan, South-East Asia

Rice bran wax is isolated from rice bran. The content of Rice bran wax in rice bran is about 1.5%. The rice bran wax is consisting of esters of fatty acids, free fatty acids and high alcohols. Main ester of Rice bran was is ester of behenic acid(C22) and lignoceric acid(C24).

Products line-up



Trade Name	Form	Packing size	Characteristic	Application	Dosage(%) in Formulation	Function in formulation	Melting Point (°C)	Resin (%)
TOWAX-3P4	Pellet	20kg	Food additives grade	General cosmetics	1-10	Emollient Thickner	77-83	-

Bees Wax

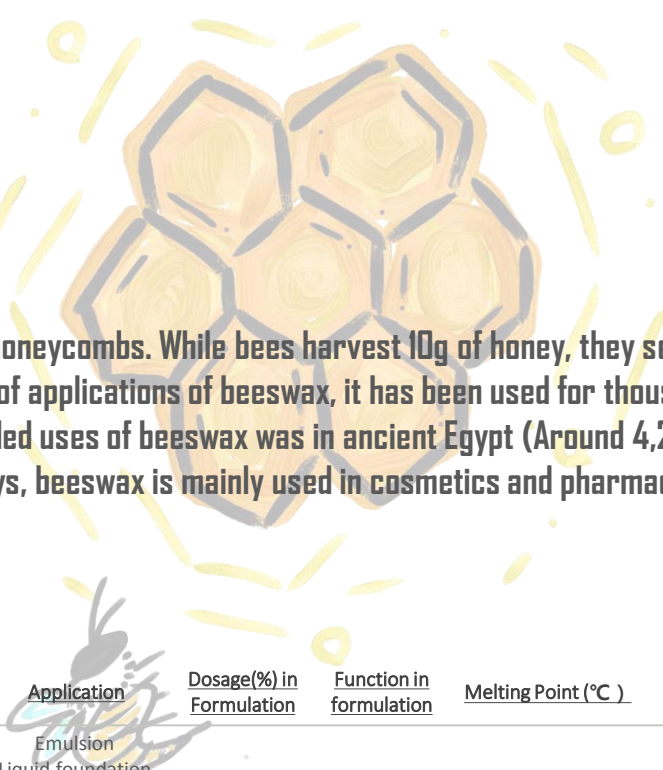
INCI name : Beeswax

Chinese INCI : 蜂蜡

Origin : Australia

Beeswax is natural wax obtained from the honeycombs. While bees harvest 10g of honey, they secrete only 1g of beeswax. Due to the wide variety of applications of beeswax, it has been used for thousands of years in human history. The earliest recorded uses of beeswax was in ancient Egypt (Around 4,200 B.C.) as a preservative of mummy. Nowadays, beeswax is mainly used in cosmetics and pharmaceutical field.

Products line-up



Trade Name	Form	Packing size	Characteristic	Application	Dosage(%) in Formulation	Function in formulation	Melting Point (°C)	Resin (%)
TOAWAX-Bees	Pellet	20kg	Non-chemical process / Light color / odorless / POV stability / Food additives grade	Emulsion Liquid foundation Lip stick Powder foundation Hair wax	1 - 10	Emollint Thickner	60-67	-

Sunflower Wax

INCI name : Helianthus annuus (sunflower) seed wax
Chinese INCI : 向日葵 (HELIANTHUS ANNUUS) 籽蜡
Origin : India

Sunflower wax is made from the oil of Sunflower seed (*Helianthus annuus*) and it contains rich amount of ester. Sunflower seed oil contain Linoleic acid and it is well known as decrease cholesterol and improve blood circulation.

Products line-up

Trade Name	Form	Packing size	Characteristic	Application	Dosage(%) in Formulation	Function in formulation	Melting Point (°C)	Resin (%)
TOWAX-6F2	Flake	20kg	Good transparency / good solidification at low temperature / high content of ester	Emulsion Liquid foundation Lip stick Powder Foundation Hair wax Make-up product	1 - 10	Emollient Texturizer Thickner	73.5-79.5	-

Rose Wax

INCI name : Rosa damascena flower wax
Chinese INCI : 突厥蔷薇 (ROSA DAMASCENA) 花蜡
Origin : Bulgaria

Rose wax is isolated from the *Rosa damascena* flower of Bulgaria. *Rosa Damascena* has a long history in Ancient Persia. And since the 17th century, the oil of *Rosa Damascena* has impacted the livelihood, culture and traditions of Bulgarians. We developed the high-refined *Rosa damascena* flower wax by using our purification technology.

Products line-up

Trade Name	Form	Packing size	Characteristic	Application	Dosage(%) in Formulation	Function in formulation	Melting Point (°C)	Resin (%)
TOWAX-6B2	Block	1kg	Low melting point / Fragrance of damask rose	Lip sticks Hair wax Hair colon Emulsion	1 - 3	Emollient Thickner Natural fragrance	50-63	-

Create new values with you



We cover a broad range of business fields. We are able to provide solution with novel perspectives that are not bound by existing values.

We always create innovation



1. Technology transfer

Thanks to our network in different business fields, we are able to provide the best solution to solve your problem.



2. Collaborative research with customers

In order to meet the needs of customer, we provide active supports for the research and development.

In our recent collaboration, we optimized the resin content of carnauba wax for Mascara application to improve the long-lasting for the eyelashes shape retaining.



3. Customizing

We provide the most suitable natural wax in accordance with your purposes. Please contact us for any challenges.

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