Kojic Acid VS Kojic Acid Dipalmitate

	Kojic Acid Dipalmitate	**Kojic Acid**
Molecular Weight	618.93g/mol	142.11g/mol
Physicochemical Property	White crystalline powder. Melting point is 92-96℃.	White to yellowish crystalline powder Melting point is 150℃-154℃.
Solubility	Insoluble in water, soluble in oil, propylene glycol.	Soluble in water, ethanol and ethyl acetate, slightly soluble in ether, chloroform and pyridine.
pH Stability	Stable from 3 to 10, which is flexible for formulation.	Unstable when pH above 7
Color Stability	Does not complex with metal ions, and will not change color.	Easy to chelate with metal ions resulting in color change (yellow or brown).
Other Stability	Light and heat stable, not easy to be oxidized: 1% kojic acid dipalmitate cream will not change color when kept for 1 month at 45°C.	Poor stability of light, heat and metal ions, easy to be oxidized: 1% kojic acid cream will become yellow or brown when kept for 1 month at 45°C.
Compatibility	Compatible with most cosmetic ingredients, especially when combined with sunscreen. Kojic acid dipalmitate is oil soluble, and is more easily absorbed by skin when added to cream than kojic acid.	Due to potential hydrogen bond in its molecular structure, kojic acid is incompatible with some organic sunscreens and preservatives.