

Dehydrated Castor Oil (DCO)

Polymerized Dehydrated Castor Oil Z-3

- DCO is a unique drying oil made from the non-drying oil, castor oil, through chemical reactions.
- The composition of the fatty acid in DCO is mostly octa decadienoic acid and the most characteristic is that it contains conjugated linoleic acid.
- DCO dries quicker than linseed oil and its paints are excellent in non-yellowing property, adhesion to metals, chemical resistance, water-proof, flexibility, hardness and gloss.
- DCO is made into varnish, alkyd resin or styrene oil, etc to be used in synthetic resin coatings and printing inks.
- DCO Z-3 in which higher viscosity through polymerization is added is less likely to be gelled during varnish-cooking. Furthermore, it can be cold-cut thus the production control of varnish is much easier.
- DCO Z-3 is suitable for white or light color quick-drying enamel, super varnish, insulation varnish, printing inks, caulking and processing material for reinforcing steel.

Product	Color Gardner	Viscosity Gardner Holdt 25°C	Acid Value mgKOH/g	Iodine Value gI ₂ /100g	Hydroxyl Value mgKOH/g	Package
DCO	Max 5	F~H	Max 2.0	135~145	Max 18	17kgCN,190kgDM
Polymerized DCO Z-3	Max 8	Z2~Z4	Max 8	120~130	—	17kgCN

Hydrogenated Castor Oil

- Hydrogenated castor oil is a white and hard wax with a melting point about 85°C.
- It is compatible with ethyl cellulose, cellulose acetate butyrate, natural and synthetic rubber, polyethylene, polyvinyl butyrate, polymethacrylate, rosins, shellacs, botanical wax, and montan wax, etc.
- Hydrogenated castor oil is relatively stable against heat and able to improve resistance against solvent and grease, as well as hardness and melting point of other waxes by blending together.
- It can be used in cosmetics, grease, shoe cream, polish, crayons and pharmaceuticals.

Product	Appearance	Color Gardner	Melting Point °C	Acid Value mgKOH/g	Saponification Value mgKOH/g	Iodine Value gI ₂ /100g	Hydroxyl Value mgKOH/g	Package
Hydrogenated Castor Oil	White Flake	Max 2	84~87	Max 2	175~185	Max 3	155~165	20kgBS,500kgFB
Hydrogenated Castor Oil	White Flake	Max 3	80~90	Max 3	175~185	Max 5	150~165	20kgBS,500kgFB

Castor Oil Fatty Acid (CO-FA)

- CO-FA is a fatty acid made by saponifying castor oil and appeared as light yellow liquid with freezing point about 5°C.
- CO-FA S is the lighter color grade.
- CO-FA is composed of about 90% of Ricinoleic acid, and the balances are oleic acid (2.5 – 4%), linoleic acid (3.5 – 5%), palmitic acid (0.5 – 1.5%), stearic acid (0.5 – 1.5%) and dihydroxy stearic acid (0.5 – 1.5%), etc.
- CO-FA and Ricinoleic acid can be used for production of coating resins, metal working oils, plastic additives, surfactants and food additives.

Product	Color Gardner	Neutralization Value mgKOH/g	Saponification Value mgKOH/g	Iodine Value gI ₂ /100g	Package
CO-FA	Max 6	175~185	185~195	85~95	16kgCN, 190kgDM
CO-FA S	Max 4	175~185	185~195	85~95	16kgCN, 190kgDM

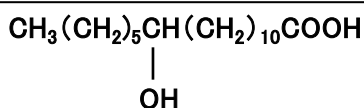
Dehydrated Castor Oil (DCO-FA)

- DCO-FA is made through saponification treatment of DCO. It is composed mostly of octadecadienoic acid with about 35% ratio of the conjugated dienoic acid.
- DCO-FA is used as a denaturant of epoxy ester resin and styrene alkyd resin for high monochrome baking synthetic resin coating and printing varnish.

Product	Color Gardner	Neutralization Value mgKOH/g	Saponification Value mgKOH/g	Iodine Value gI ₂ /100g	Package
DCO-FA	Max 1	198~202	198~202	155~160	16kgCN, 180kgDM
DCO-FA-C	Max 2	195~205	—	140~160	180kgDM

12-Hydroxystearic acid

- 12-hydroxystearic acid is a hydroxyl fatty acid wax which is obtained by saponifying hydrogenated castor oil.

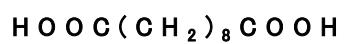


- 12-hydroxystearic acid is compatible with most organic solvents. When a warm nonpolar solvent is refrigerated with 12-hydroxystearic acid, slight gel appears.
- Lithium salt of 12-Hydroxystearic acid is suitable as a density enhancer of higher multipurpose grease. In addition, it can be used as a raw material for cosmetic and oleo industry.

Product	Appearance	Color Gardner	Melting Point °C	Neutralization Value mgKOH/g	Saponification Value mgKOH/g	Iodine Value gI ₂ /100g	Hydroxyl Value mgKOH/g	Package
12 Hydroxystearic Acid	White Flake	Max 4	75~78	175~185	180~190	Max 3	153~163	20kgBS,500kgFB
12 Hydroxystearic Acid B	White Flake	Max 7	Max 72	175~185	180~190	Max 4	150~165	20kgBS,500kgFB

Sebacic Acid

- Sebacic Acid is normal saturated dibasic acid having 10 carbon atoms made by cleavage reaction with caustic alkali of castor oil.



- Sebacic Acid can be used as dioctyl sebacate(DOS) in plasticizer, grease, lubricant and hydraulic oil.
- The main applications of Sebacic Acid are 6, 10 nylon Alkyd resin, polyester resin and anti-rust agent.

Product	Appearance	Neutralization Value mgKOH/g	Color Gardner	Melting Point °C	Package
Sebacic Acid TA	White Bead	552~555	Max 1	132~135	20kgBS, 500kgFB
Sebacic Acid SR	White Bead	530~570	Max 5	120~140	20kgBS, 500kgFB