

OLERIS[®]

2-Octanol - CAS: 123-96-6

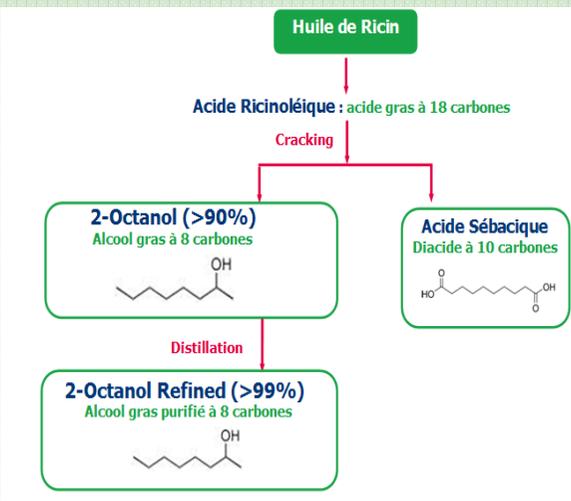


Where does the 2-Octanol come from?

The 2-Octanol is produced through a cracking process of Castor oil. During this operation, the major component of Castor oil, the Ricinoleic Acid (C18 natural fatty acid) is cut into two molecules: the Sebacic Acid (C10 diacid) and the 2-Octanol (C8 Fatty Alcohol).

The Ricinus communis (Castor plant) is mainly cultivated in India and China. Castor oil is historically known to have medicinal virtues and was used in many applications. Nowadays, this oil is used in various industries: Cosmetic, Lube Oil, Paints & Coatings, Adhesives, Surfactants, etc...

The Castor plant is highly resistant and can be grown on poor land. This feature prevents farmers from damaging local food crops by cultivating Castor plant and to slows down deforestation linked to its culture.



Castor Crops



Castor Plant



Castor Oil

What are the key features of the 2-Octanol?

SOLVANCY PROPERTIES

2-Octanol offers good solvating properties for numerous resins.
Hansen Solubility Parameter : 20.02 MPa 0.5
Its performances combined with its safe use (Flash Point 76° C) and its natural origin make it a strong candidate of green solvent.



SUPERFICIAL TENSION

2-Octanol has a low superficial tension giving it good wetting and defoaming properties.



CHEMICAL REACTIVITY

2-Octanol is a chemical intermediate used to synthesize various molecules such as: Esters (Acrylates, Adipates, Maléates, Sébacates, Palmitates, Myristates), Polyesters, Ketones (2-Octanone), Ethoxylated Fatty Alcohols, Sulfated Alcohols, etc...



ORGANOLEPTIC PROPERTIES

2-Octanol is a 100% biobased natural intermediate used in flavours & fragrances.



What are the applications of the 2-Octanol ?

2-Octanol can be used as such in direct applications or as a raw material to produce various molecules like esters, polyols, ketones, ethoxylates, etc....



The 2-Octanol main current applications are in:

- Defoaming agent in different processes
- Intermediate in Flavours & Fragrances
- Intermediate to produce pesticides and herbicides
- Intermediate to make emollient esters used in cosmetic and plasticizers esters for various industrial fields



2-Octanol can also be used as a green solvent for many resins (Isocyanates, short alkyd, epoxy...) and in the extraction process of rare minerals.



Finally, in the same way as for 1-Octanol and 2-Ethylhexyl alcohol, 2-Octanol can undergo further chemical reaction to produce :

- Adipates, Maleates, Palmitates, Sebacates, Stearates for Cosmetic, Paints & Coatings, Paper, Textile, Plastic markets...
- Ethoxylated & Sulfated Fatty alcohols for Detergency and Personal Care markets...
- Phthalates
- Green acrylates used in Paints & Coatings, Adhesives, etc...



Why choose the 2-Octanol Oleris® of Arkema ?

•Expertise and Experience of Castor Oil Chemistry

For more than 60 years, Arkema has developed biobased products from castor oil chemistry. Ex : Polyamide 11 Rilsan®. This expertise led Arkema to create the Oleris® range of products in order to meet our customers' performance and quality requirements.



•Secured Supply Chain

In 2012, with the acquisition of the Chinese Plant Casda Biomaterials, Arkema became the world's largest producer of 2-Octanol. In 2013, Arkema partnered up with Jayant Agro, an Indian company specialized in the Castor Oil production. This joint venture secures Arkema supply chain on its biobased range of products and guarantees delivery on a long-term basis for our clients.

•Reliability & Innovation of an International Group

Arkema, world-class specialty chemicals company, has a revenue of €6.1 billion. The Arkema Group places Innovation at the heart of its strategy in order to develop tomorrow's products using a modern and responsible chemistry. Biosourced Chemicals through Castor Oil Chemistry is one of Arkema's key target areas which already led to numerous innovations in which the 2-Octanol took part.

•We support you at all stages of your project

- 2 purity grades are available: 2-Octanol (>90%) et 2-octanol Refined (>99%)
- Pre-registration REACH
- FDS/SDS/MSDS and TDS
- Sampling Service
- Price Quotation
- Worldwide Delivery
- Technical & Marketing Support