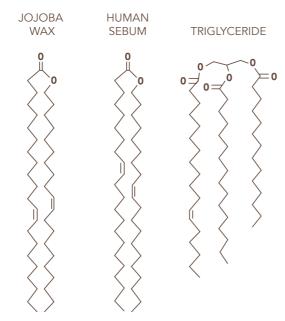




# Sebum Biomimetic Liquid Wax for Skin Balance

JD Jojoba Oil is 100% natural, cold-pressed, rich in Omega-9 and Vitamin E, grown and produced under strict sustainable practices, providing skin barrier improvement, superior moisturizing effect and incomparable oxidative stability. Unlike other natural oils, JD Jojoba Oil is not an oil, it's a liquid wax that mimics 30% of human sebum, is easily absorbed, doesn't leave a greasy residue, and is the ideal ingredient for multiple applications.

### Molecular Structure Comparison



INCI name: Simmondsia Chinensis (Jojoba) Seed Oil

**CAS #:** 90045-98-0/61789-91-1

**Description:** Extra virgin liquid wax, obtained from natural Jojoba seeds

**Production method:** Cold Press

#### **Skin Care Benefits**

- A Superior Replacement for Mineral Oil
- · Hydro Lipid Barrier Reinforcement
- Non Acnegenic and Non Comedogenic
- 23% Sebum Secretion Reduction
- Sensory Superiority
- Deep Moisturizing Effect
- · Microbiome Positive Influence on Adult and Infant Skin

#### Hair Care Benefits

- 60% Efficient and Constant Hair Frizz Reduction
- Hair Shine Increase
- Hair Conditioning Effect

#### **Key Benefits**



100% oil-free, liquid wax



and gluten free



Mimics the human sebum



Contains Omega 9 & Vitamin E



High resistance towards oxidation



Long shelf life of at least 3 years



Non-comedogenic, Non-irritant properties



for all skin types



Antiinflammatory effect



Wound-healing properties



Biodegradable



Microbiome friendly



#### **Recommended Applications:**

All Cosmetic Formulations



#### **Grades:**

JD Jojoba Golden Oil



JD Jojoba Colorless Oil

JD Jojoba Organic Colorless Oil

\*All grades available in odorless version





















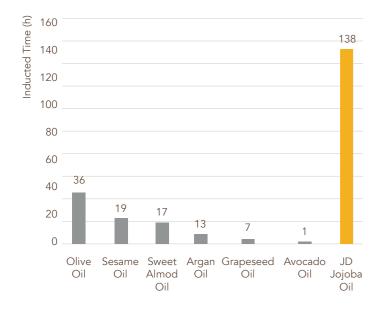


Certified organic for NOP by Control Union Certifications 862851

# High Oxidation Stability

## Highest Oxidation Stability Among Vegetable Oils

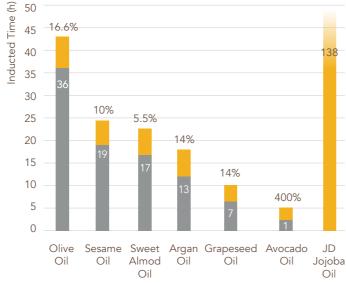
Jojoba oil is one of the most stable natural oils on the market, and its stability could prove critical in creating formulations with long shelf-life. In a recent study, JD Jojoba Oil showed the highest oxidation stability among tested oils.



The oxidative stability was determined using Rancimat methods at 110° C in collaboration with Agricultural Research Organization the Volcani Center, Israel

### Improves Oxidative Stability of Other Carrier Oils

Not only was JD Jojoba Oil shown to have outstanding stability, but adding JD Jojoba Oil to other carrier oils, improved their stability to much higher levels.



The oxidative stability was determined using Rancimat methods in collaboration with Agricultural Research Organization - the Volcani Center, Israel



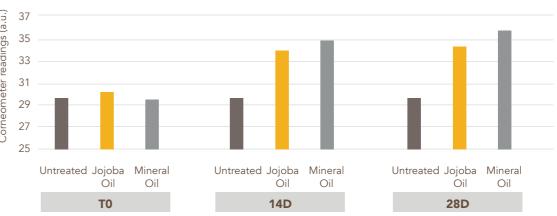
# A Superior Replacement for Mineral Oil

As the beauty industry continues to evolve, the search for healthier alternatives to Mineral Oil has become a priority. A recent study has shed light on the exceptional qualities of JD Jojoba Oil as a replacement for Mineral Oil in cosmetic formulations. This study evaluated the efficacy of two test products - JD Jojoba Oil cream and Mineral Oil cream in increasing skin hydration and reducing trans epidermal water loss (TEWL) in individuals with a disturbed barrier function of the skin. The study yielded compelling results - JD Jojoba Oil is as Effective as Mineral Oil.

### JD Jojoba Oil is as Effective as Mineral Oil in Increasing Skin Hydration, Reducing TEWL and Enhancing Skin Barrier

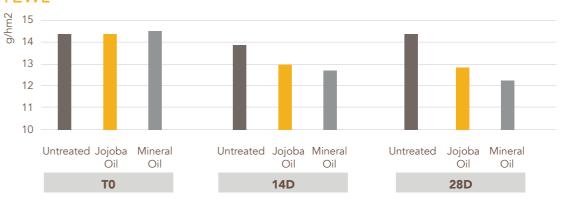
95% of the study participants using JD Jojoba Oil cream showed positive effects in skin hydration.

#### Skin Hydration



Both JD Jojoba Oil and Mineral Oil creams effectively strengthened the barrier function of the skin, reducing water loss and improving overall skin health.

#### **TEWL**



#### **Study Design:**

- 20 female panelists (20-60 years, average 41.1).
- Formulation with 15% of Jojoba Oil vs. formulation with 15% of Mineral oil.

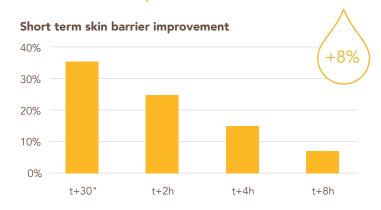
  Both formulations were applied twice a day for 28 days on the test areas inner side of the forearms.
- The panelists were known to have a disturbed skin barrier function (TEWL record of ≥ 10 gr/(hm2).
- Measured with Corneometer Tewameter Triple TM 330 T.

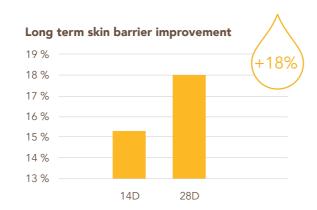
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# Improving Skin Barrier

As skin barrier is the skin's first line of defense against external aggressors such as bacteria, irritants and pollution, it is also responsible for retaining moisture. Jojoba oil is known for its unique contributions to the vitality of the skin, so we conducted a series of clinical studies to define the effects of JD Jojoba Golden Oil on skin barrier and water loss prevention.

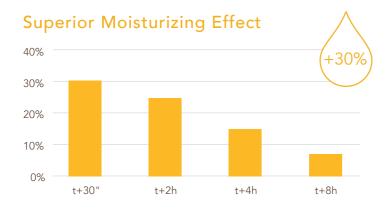
#### Skin Barrier Improvement (TEWL)





#### Study Design:

- 22 female panelists (average age 50) with normal and dry skin types.
- 28 days of twice a day application as a moisturizer.
- Measurement zones: face for the long-term and forearm for the short-term.



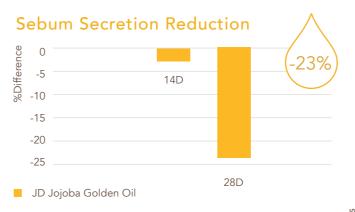


#### Study Design:

- 22 female panelists (average age 50) with normal and dry skin types.
- · Measurement zone: forearm.

# Sebum Secretion Reduction, Non Comedogenic & Non Acnegenic

One of the most common dermatologic concerns is oily skin. Oily skin is typically characterized by increased sebum secretion, meaning over-active sebaceous glands produce excess oil on the face, resulting in persistently shiny or greasy appearance. Neglecting oily skin may result in clogged and enlarged pores, and dead skin cells may accumulate. Blackheads, pimples, and other types of acne are also common with this skin type. A study was conducted to evaluate the effect of JD Jojoba Golden Oil on sebum secretion.

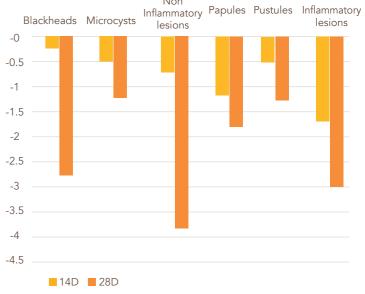


#### Study design:

- 20 female panelists (average age 45) with combination and oily skin types.
- 28 days of twice a day application as a moisturizer.

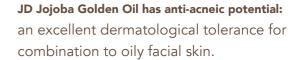
#### Non Comedogenic and Non Acnegenic

Based on the previous test that clearly indicates the ability of JD Jojoba Golden Oil to reduce sebum secretion, the examination of its effectiveness for acne prone skin was required, since acne-prone skin conditions can be improved by balancing the sebum secretion.



#### Study Design:

• Clinical study with 20 female volunteers (average age 45) with combination to oily facial skin with acne grade 1 to 2 on the GEA scale, 28 days of twice a day application.





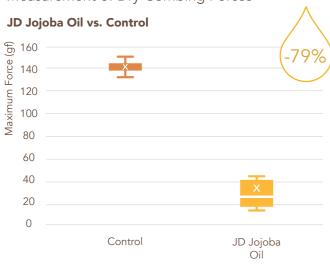
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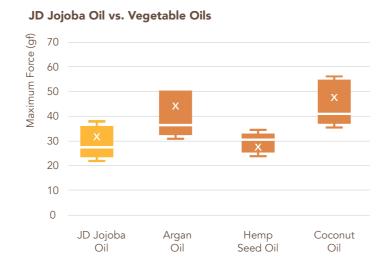
## Hair Care Benefits

The environment can be harsh on hair, and as a result, hair care brands are in a race to solve common challenges like taming frizz, restoring shine and preventing breakage of the hair. To evaluate the effect of JD Jojoba Oil on these hair care challenges, in compared to other oils which are commonly used, 3 experiments were conducted.

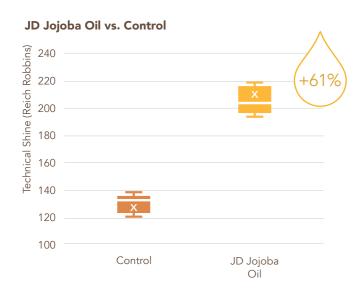
#### **Excellent Conditioning Effect**

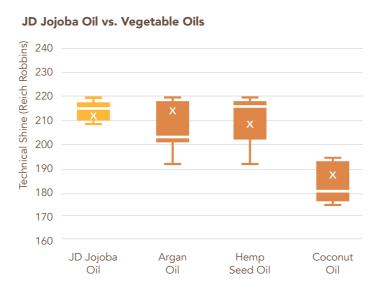
Measurement of Dry Combing Forces





#### **Excellent Hair Shine Performance**





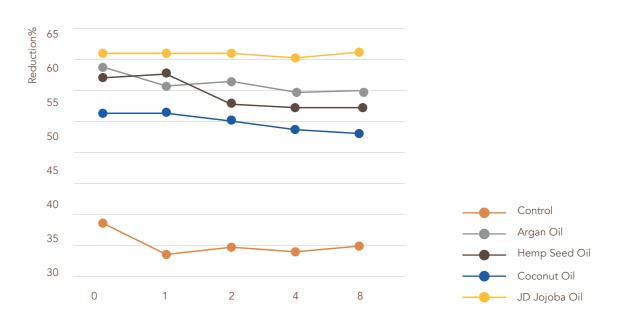
#### **Studies Design:**

- All tresses were washed with 15% SLES and left overnight to dry.
- Vegetable oils, 5% (by weight of the tress) were applied on dry hair.
- Dry tresses washed with 15% SLES were used as Control.
- 8 tresses were used per treatment group. 6 measurements were taken.

#### Frizz Reduction Vs. Time

This study was conducted to evaluate JD Jojoba Oil for its potential to reduce frizz over the course of 8 hours compared to control shampoo alone and other vegetable oils which are widely used in hair care products.

As a result, all oil systems showed a noticeable increase in straightening hair and improving resistance to spontaneous frizz even under very high humidity conditions compared to that of control groups. However, after 8 hours Argan, Hemp Seed and Coconut oil groups showed slow and continuous increase in frizz, while JD Jojoba Oil treated tresses showed resistance to spontaneous frizz during the measurement period.



#### **Study Design:**

- · All tresses were washed with 15% SLES and left overnight to dry.
- · Vegetable oils, 5% (by weight of the tress) were applied on dry hair.
- All groups of tresses were equilibrated overnight in a controlled humidity chamber 30% RH and the initial post treatment was performed.
- Humidity was increased to 80% RH and images were taken after 1, 2, 4 and 8 hours Dry tresses washed with 15% SLES were used as Control.
- 8 tresses were used per treatment group to evaluate product performance and to ensure statistical relevance.



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# JD Jojoba Oil & Derivatives

	PRODUCT	CAS#									
	JD Jojoba Golden Oil	Simmondsia Chinensis (Jojoba) Seed Oil	90045-98-0/ 61789-91-1								
D PURE	JD Jojoba Colorless Oil (Odorless version available)	Simmondsia Chinensis (Jojoba) Seed Oil	90045-98-0/ 61789-91-1								
	JD Jojoba Organic Golden Oil	Simmondsia Chinensis (Jojoba) Seed Oil	90045-98-0/ 61789-91-1								
JD Jojoba C  JD JD	JD Jojoba Organic Colorless Oil (Odorless version available)	Simmondsia Chinensis (Jojoba) Seed Oil	90045-98-0/ 61789-91-1								
	JD Jojoba Golden Butter	Simmondsia Chinensis (Jojoba) Seed Oil, Cera Alba, Hydrogenated Vegetable Oil	90045-98-0/ 61789-91-1; 8012-89-3; 68334-28-1								
	JD Jojoba Colorless Butter	Simmondsia Chinensis (Jojoba) Seed Oil, Cera Alba, Hydrogenated Vegetable Oil	90045-98-0/ 61789-91-1; 8012-89-3; 68334-28-1								
	JD Jojoba Butter Vegan	Simmondsia Chinensis (Jojoba) Seed Oil, Stearyl Stearate (and) Rhus Verniciflua Cera (and) Copernieia Cerifera Cera, Hydrogenated Vegetable Oil	90045-98-0/61789-91-1, 97404-33-6, 8015-86-9, 68334-28-1								
NAL	JD Jojoba Oil Cream Base	Simmondsia Chinensis (Jojoba) Seed Oil, Polysorbate 20, Bees Wax, Propanediol, Tocopherol	90045-98-0/ 61789-91-1, 9005-64-5, 59-02-9, 8006-40-4, 504-63-2								
INCTIO	JD Jojoba Silk-like Powder	Tapioca Starch, Simmondsia Chinensis (Jojoba) Seed Oil	9005-25-8; 90045-98-0/ 61789-91-1								
JD FU	JD Jojoba Hair Complex	Simmondsia Chinensis (Jojoba) Seed Oil, Cocos Nucifera (Coconut) Oil, Cannabis Sativa Seed Oil, Solanium Lycopersicum Seed Oil (and) Caprylic/Capric Triglyceride (and) Vaccinium Macrocarpon Seed Oil (and) Helianthus Annuus Seed Oil (and) Tocopherol	90045-98-0/ 61789-91-1, 8001-31-8, 89958-21-4, 90131-63-8 / 73398-61-5 / 91770-88-6 / 8001-21-6 / 10191-41-0								
	JD Lusteris™	Jojoba Esters, Jojoba Alcohol, Propanediol, Tocopherol	61789-91-1, 68002-95-9, 504-63-2, 59- 02-9 / 16698-35-4 / 54-28-4 / 119-13-1								
JD ACTIVE	JD Phyto-Or 1%™	Simmondsia Chinensis (Jojoba) Seed Oil; Blakeslea Trispora Mycelium Extract/C30-45 Olefin	61789-91-1/90045-98-0; 13920-14-4/ 222400-22-8								

	Benefits					Applications						Formulation Types						
DESCRIPTION	Emolliency	Softening	Moisturization	Smoothing	Texture	Skin Feel	Skin Care	Anhydrous	Lip Care	Hair Care	Cleansers	Sun Care	Emulsion	Sticks	Surfactant System	Color cosmetics	Pressed Powders	Baby products
Pure natural liquid wax, composed of esters extracted from jojoba (Simmondsia Chinenis) seeds. Rich clear golden liquid with extraordinarily beneficial properties. Safe for all skin types.	•	•	•	•	Golden oil		•	•	•	•	•	•	•	•	•	•	•	•
Pure natural liquid wax, composed of esters extracted from jojoba (Simmondsia Chinenis) seeds. Rich colorless liquid with extraordinarily beneficial properties. Safe for all skin types.	•	•	•	•	Colorless oil	Non-	•	•	•	•	•	•	•	•	•	•	•	•
Pure organic natural liquid wax, composed of esters extracted from jojoba (Simmondsia Chinenis) organic seeds. Rich golden liquid with extraordinarily beneficial properties. Safe for all skin types.	•	•	•	•	Golden oil	greasy, smooth, elegant	•	•	•	•	•	•	•	•	•	•	•	•
Pure organic natural liquid wax, composed of esters extracted from jojoba (Simmondsia Chinenis) organic seeds. Rich colorless liquid with extraordinarily beneficial properties. Safe for all skin types.	•	•	•	•	Colorless oil		•	•	•	•	•	•	•	•	•	•	•	•
Unique blend of JD Jojoba Golden Oil and other natural waxes creating a soft, silky, light yellow butter. The butter fast absorbs to the skin, nourishes it and leaves a soft and silky feeling.	•	•	•	•	Light yellow butter	Non- greasy, non- sticky, smooth and fast absorbing	•	•	•	•	•	•	•	•	•	•	•	•
Unique blend of JD Jojoba Colorless Oil and other natural waxes, creating a soft, silky, light colorless butter. The butter is quickly absorbed by the skin, nourishing it and leaving a soft and silky feeling.	•	•	•	•	White butter		•	•	•	•	•	•	•	•	•	•	•	•
Unique blend of JD Jojoba Colorless oil and other Vegan natural waxes creating a soft, silky, light colorless butter. The butter is quickly absorbed by the skin, nourishing it and leaving a soft and silky feeling.	•	•	•	•	White butter		•	•	•	•	•	•	•	•	•	•	•	•
A luxuriously light mixture of jojoba oil a mild surfactant ingredients, which can be used as a fast absorbing base for creams, non-sticky lotions and washed products, leaving the skin with a silky, soft texture. Can accommodate up to 80% extra aqueous or oily vitamins, etc.	•	•	•	•	Light yellow butter	Non- sticky, smooth elegant	•	•	•	•	•	•	•	•	•	•	•	•
Jojoba Starch (Tapioca base). It is non-GMO, aluminum- free, enabling it to give off a velvety and soft sensation and enhanced compatibility with oils, water, emulsifiers & surfactants.		•		•	White powder	Smooth, Soft Starch	•	•	•	•	•	•	•	•	•	•	•	•
An exclusive complex of natural oils and vitamins essential for healthy hair and scalp, that provide moisture balance for the scalp with proven benefits for hair such as conditioning, heat protection and anti-frizz.	•	•	•	•	Golden oil	Non- greasy, smooth, elegant	•	•	•	•	•	•	•	•	•	•	•	•
A multi-functional emollient with a superior sensory effect, derived from Jojoba oil and ideally used as a non-volatile low viscosity silicone alternative. This 100% oil-free emollient, provides the skin with compounds ideal for maintaining an optimum hydration level, providing sebum control properties, deep soothing effect, acne-prone skin improvement benefits, as well as hair and scalp protection. It is biodegradable, responsibly sourced and eco-friendly.	•	•	•	•	Clear liquid	Silky, Smooth, Soft	•	•	•	•	•	•	•	•	•	•	•	•
Natural active skin repair. Enhanced skin elasticity. Improved skin tone. JD Phyto-Or 1% <sup>™</sup> features both JD Jojoba oil and concentrated Phytoene, creating a novel anti-aging and high-performing active for glowing skin and hair.	•	•	•	•	Yellow liquid	Non- greasy, smooth, elegant	•	•	•	•	•	•	•	•	•	•	•	•

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# Holistic Approach from Seed to Oil

We take a holistic approach to sustainability and social responsibility throughout all stages of manufacturing, from aspiration, cultivation, production, and supply chain-it's reflected in every aspect of what we do day by day, year on year.

# Committed to Nurture the Planet for Future Generations

Our ingredients are produced under the most stringent certification protocols and meet rigorous quality standards with a fully automated process, designed to support the rapid global demand and ensure stable supply in terms of quality and availability. Granted 10 globally recognized certifications, including Fair for Life, Ecovadis, and Ecocert, Jojoba Desert has become the leading company offering end-to-end production coverage and traceability.

#### Jojoba Desert. Creating a Green Path for Clean Cosmetics.























Certified organic for NOP by Control Union Certifications 862851

The information and data included herein, are provided to the current state of knowledge of Jojoba Desert (A.C.S) Ltd. (hereinafter "JD"), and are intended to provide general information about JD's products. It is the user's responsibility to determine the suitability and completeness of such as informatiom for the user's particular use (including performing any necessary confirmatory test). Due to possible changes in Jojoba Desert's products and applicable national and international regulations and laws, the condition or composition of the said products may change. Users must obtain and follow latest versions of relevant safety data sheets before using or handling any of the JD products. JD makes no warranties, express or implied, it does not guarantee the accuracy of the information provided above, nor does it undertake any responsibility in connection with any use of the information contained herein. JD will not be responsible or liable for any loss or damage that may occur from the use of this information. Nothing contained herein shall be construed as providing any permission, recommendation, or inducement to practice any patented invention without permission of the patent owner. For further information, please contact JD at contacts@jojobadesert.com