

First Time Ever in Natural Organic Preservatives

Natural Organic Preservatives for Cosmetic Use

Organic Danox Preservative 7000

Organic Danox Preservative R-7000

Organic Danox Preservative 8000

Organic Danox Preservative 7000F

Groundbreaking Research
in Preservatives
of Cosmeceuticals



What are Organic Danox Preservatives?

Organic Danox Preservatives are an outcome of consumer experiences that demonstrate true differentiations. If applied properly, it will allow formulators to design chemical free formulations, thus enhancing the value of cosmeceuticals.

Organic Danox Preservatives are an oil solution of natural antioxidants with **striking** anti-microbial properties. They are produced using our unique Internally Stabilization (I.S.) technology, making the final product more resistant to oxidation and degradation, by using the natural antioxidant properties of Rosemary.

- ✓ Natural Preservatives/Antioxidants
- ✓ 100% Organic
- ✓ Internally Stabilized

Microorganisms cause spoilage of cosmetic ingredients, resulting in a reduction of the quality and quantity of the final product. Some spices and herbs have biologically active substances that inhibit the growth of pathogenic microorganisms, thus enhancing the shelf life of the product they are added to. Antioxidants help to enhance the shelf life of oils, by inhibiting lipid peroxidation and other processes. These substances protect the oil from exposure to high temperatures, sunlight and other conditions that damage it.

Why Organic Danox Preservatives?

The use of plant-based natural antioxidants is becoming more and more common in the cosmetic industry, since these substances are believed to possess anti-carcinogenic potential and other health-promoting effects, including anti-inflammatory properties and antimicrobial activity.

Currently parabens are the most widely used preservatives in cosmetic products. These compounds are used to prevent the growth of bacteria and molds, but they can also pose a health risk to the consumer.

Therefore, there is a growing interest in searching for paraben-free alternatives. In order to replace these substances, the problem was the availability of a full spectrum product. Due to their excellent antimicrobial properties, the cosmetic products will not require the addition of **secondary supplements**, leading to more natural and simpler formulations and **CLEAN LABEL**.

At the recommended dosage, they can be used in any type of cosmetic formulations.

Organic Danox Preservatives are a synergistic mixture of the extract from best quality dry leaves of organic Rosemary (*Rosmarinus officinalis*), combined with the organic volatile oil steam-distilled from the best quality dried fruits of fennel (*Foeniculum vulgare*).

Rosemary Extract

The leaves of rosemary have excellent anti-oxidant properties. These properties come from high content of diterpenes, particularly Carnosic Acid and Carnosol.

Rosemary has other beneficial components with anti-inflammatory and anti-carcinogenic such as Epirosmanol, Isorosmanol, Luteolin, Ursolic acid, Rosmarinic acid and Caffeic acid. Other health benefits of rosemary include anagestic, anti-ulcerogenic and hepatoprotective activity. It also has strong anti-bacterial properties.



Fennel Oil

The seeds of this herb have medicinal properties that come from the various components of the essential oil of fennel, including Alpha Pinene, Anisic Aldehyde, Cineole, Fenchone, Myrcene, imonene, Methyl Chavicol and Trans Anthole.



Fennel essential oil is well-known due to its strong anti-bacterial and anti-fungal activity. It also has anti-oxidant, anti-inflammatory, hypotensive, hepatoprotective, antithrombotic and anti-mutagenic activity.

Properties

Organic Danox Preservatives are used as very strong preservatives, protecting vegetable oils against oxidation and loss of antioxidants. Their powerful antimicrobial properties will also help to inhibit the growth of pathogenic microorganisms, avoiding spoilage of cosmetic ingredients.

Recommended dosage is minimum 5000 ppm (0,5% of the final product).

❖ **Organic Danox Preservative 7000**

With no smell or taste of rosemary

❖ **Organic Danox Preservative R-7000**

With no smell or taste of fennel or rosemary. For applications where the smell of fennel is not desired.

❖ **Organic Danox Preservative 7000F**

With broad spectrum anti-microbial activity and no smell or taste of rosemary.

❖ **Organic Danox Preservative 8000**

Specifically designed for powder, with no smell or taste of rosemary.

Results

ORGANISM	<i>Pseudomonas aeruginosa</i>	<i>Staphylococcus aureus</i>	<i>Candida albicans</i>	<i>Aspergillus niger</i>	<i>Escherichia coli</i>
ATCC No.	9027	65380	10231	16404	8739
Incubation temperature (°C)	22	22	22	22	22
Density (cfu/mL)	10 ⁹	10 ¹⁰	10 ⁸	10 ⁷	10 ⁹
Volume added, mL	0,25	0,25	0,25	0,25	0,25
Total No. added	2,5 x 10 ⁸	2,5 x 10 ⁹	2,5 x 10 ⁷	2,5 x 10 ⁶	2,5 x 10 ⁸
No. added mL ⁻¹ of product	10 ⁷	10 ⁸	10 ⁶	10 ⁵	10 ⁷
Counts after 2 days	5,7 x 10 ⁵	5.6 x 10 ⁵	10 ⁷	10 ⁷	10 ⁷
Log reduction	0	>1	0	0	0
Counts after 7 days	<1000	<1000	<1000	<1000	<1000
Log reduction	>4	>4	>3	>3	>4
Counts after 14 days	<1000	<1000	<1000	<1000	<1000
Log reduction	>3	>5	>4	>2	>3
Counts after 28 days	<1000	<1000	<1000	<1000	<1000
Log reduction	>5	>3	>1	>2	>3
Product passed	Yes	Yes	Yes	Yes	Yes

Ingredients of the lotion: Aloe Barbadensis Gel Organic, Helianthus Annuus (Sunflower) Oil Organic, Glycerin Organic, Carnuba Wax Organic, Cera Alba (beeswax) Organic, Sucrose Coccoate Organic, Citrus Sinensis (Orange) Peel Oil Organic, Xanthan Gum, Chamomilla Recutita (Matricaria) Flower Extract Organic, Lavandula Angustifolia (Lavender) Oil Organic, Sclerocarya Birrea (Marula) Oil Organic, Maranta Arudinacea (Arrowroot) Powder Organic, Theobroma Cacao (Cocoa) Seed Butter Organic, Butyrospermum Parkii (Shea Butter) Organic.

Results and Conclusions

Organic Danox Preservative 7000 has been tested, by adding 5000 ppm to a NOP certified organic lotion with high content of aloe/water (56%).

This mixture was subjected to a challenge test against a panel of microorganisms, including several species of bacteria and pathogenic fungi.

The results from this challenge test show that Organic Danox Preservative 7000 has considerable antimicrobial activity against all the strains tested. It has inhibited the growth of all the pathogens evaluated, enhancing the shelf life of the product.

Therefore, the addition of these organic preservatives at recommended level of dosage will increase dramatically the stability and shelf life of cosmetic products. These natural blends could be used as replacement for chemical additives and synthetic antimicrobial, enabling both preservatives to be included in natural and organic products.

In conclusion, Organic Danox Preservatives can be successfully applied for natural and organic products using them as organic highly powerful antioxidants and preservatives.

Product Description

Danox Preservative 7000 Organic is an oil solution of natural antioxidants with anti-microbial properties. This natural antioxidant and preservative product is a synergistic mixture of the extract from best quality dry leaves of organic Rosemary (*Rosmarinus officinalis*), combined with the organic volatile oil steam-distilled from the best quality dried fruits of fennel (*Foeniculum vulgare*). Carefully chosen top quality organic vegetable oil has been used as the carrier.

Recommended dosage of Danox Preservative 7000 Organic is minimum 5000 ppm. At recommended level of dosage, the final product has no characteristic taste, smell, colour or odour generally associated with Rosemary extracts.

Product code, INCI Name and CAS No.

Product code:	511101	
INCI name:	Helianthus Annuus Seed Oil	Rosmarinus officinalis leaf oil
CAS no.:	8001-21-6	84604-14-8/8000-25-7
EINECS no:	232-273-9	283-291-9
INCI name:	Foeniculum Vulgare Fruit Oil	
CAS no.:	84625-39-8	
EINECS no:	283-414-6	

Specifications

Appearance:	Dark yellow to brownish opaque oil
Odour:	Slightly characteristic
Water:	Max 0.5%

Use in Cosmetics

Danox Preservative 7000 Organic is used as a very strong preservative, protecting oils and butters against oxidation and loss of antioxidants. Its powerful antimicrobial properties will also help to inhibit the growth of pathogenic microorganisms, avoiding spoilage of both food and cosmetic ingredients. Therefore, the addition of Danox Preservative 7000 Organic at recommended level of dosage will increase dramatically the stability and shelf life of cosmetic products. This natural blend could be used as replacement for chemical additives and synthetic antimicrobial agents, enabling Danox Preservative 7000 Organic to be included in natural and organic products.

Storage

Keep in a cool (preferably below 5 to 10°C, the cooler the better), dark and dry store-room.

Shelf Life

Under optimal storage conditions, in original unopened drums/containers, minimum five years.



Product Description

Danox Preservative R-7000 Organic is an oil solution of natural antioxidants with anti-microbial properties. This natural antioxidant and preservative product is a synergistic mixture of the extract from best quality dry leaves of organic Rosemary (*Rosmarinus officinalis*), combined with the organic volatile oil steam-distilled from the best quality dried fruits of fennel (*Foeniculum vulgare*). Carefully chosen top quality organic vegetable oil has been used as the carrier. Applying modern techniques of extraction, characteristic odour and flavour have been drastically reduced from Danox Preservative R-7000 Organic.

Recommended dosage of Danox Preservative R-7000 Organic is minimum 5000 ppm. At recommended level of dosage, the final product has no characteristic taste, smell, color or odor generally associated with Rosemary extracts or Fennel oil.

Product code, INCI Name and CAS No.

Product code:	511111	
INCI Name:	CAS no.:	EINECS:
Helianthus Annuus Seed Oil	8001-21-6	232-273-9
Rosmarinus officinalis leaf oil	84604-14-8/8000-25-7	283-291-9
Foeniculum Vulgare Fruit Oil	84625-39-8	283-414-6

Specifications

Appearance:	Dark yellow to brownish opaque oil
Odor:	Slight characteristic fennel odor
Water:	Max 0.5%

Use in Cosmetics

Danox Preservative R-7000 Organic is used as a very strong preservative, protecting oils and butters against oxidation and loss of antioxidants. Its powerful antimicrobial properties will also help to inhibit the growth of pathogenic microorganisms, avoiding spoilage of both food and cosmetic ingredients. Therefore, the addition of Danox Preservative R-7000 Organic at recommended level of dosage will increase dramatically the stability and shelf life of cosmetic products. This natural blend could be used as replacement for chemical additives and synthetic antimicrobial agents, enabling Danox Preservative R-7000 Organic to be included in natural and organic products.

Storage

Keep in a cool (preferably below 5 to 10°C, the cooler the better), dark and dry store-room.

Shelf Life

Under optimal storage conditions, in original unopened drums/containers, minimum five years.

Product Description

Danox Preservative 7000F Organic is an oil solution of natural antioxidants with enhanced anti-microbial properties. This natural preservative product is a synergistic mixture of the extract from best quality dry leaves of organic Rosemary (*Rosmarinus officinalis*), combined with the organic volatile oil steam-distilled from the best quality seeds of fennel (*Foeniculum vulgare*). Carefully chosen top quality organic vegetable oil has been used as the carrier.

Recommended dosage of Danox Preservative 7000F Organic is minimum 5000 ppm. At recommended level of dosage, the final product has no characteristic taste, smell, colour or odour generally associated with Rosemary extracts.

Product Code, INCI Name and CAS No.

Product code:	511161	
INCI Name:	CAS no.:	EC/EINICS no.:
Helianthus Annuus Seed Oil	8001-21-6	232-273-9
Rosmarinus officinalis leaf extract	84604-14-8	283-291-9
Foeniculum Vulgare Oil	8006-84-6	N/A

Specifications

Appearance:	Dark yellow to brownish opaque oil
Odor:	Slight characteristic fennel odor
Water (%):	Max. 0.5

Use in Cosmetics

Danox Preservative 7000F Organic is used as a very strong preservative, protecting oils and butters against oxidation. Its powerful antimicrobial properties will also help to inhibit the growth of pathogenic microorganisms, avoiding spoilage of both food and cosmetic ingredients. Therefore, the addition of Danox Preservative 7000F Organic at recommended level of dosage will increase dramatically the stability and shelf life of cosmetic products. This natural blend could be used as replacement for chemical additives and synthetic antimicrobial agents, enabling Danox Preservative 7000 Organic to be included in natural and organic products. Danox Preservative 7000F Organic works in the full spectrum of microorganisms, this being effective against bacteria, yeasts and moulds. It has been successfully tested against *Escherichia Coli*, *Staphylococcus Aureus*, *Pseudomonas Aeruginosa*, *Candida Albicans* and *Aspergillus Brasiliensis*.

Storage

Keep in a cool (preferably below 10 °C, the cooler the better), dark and dry store-room.

Shelf Life

Under optimal storage conditions, in original unopened drums/containers, minimum two years.

Product Description

Danox Preservative 8000 Organic is an oil solution of natural antioxidants with anti-microbial properties. This natural antioxidant and preservative product is a synergistic mixture of the extract from best quality dry leaves of organic Rosemary (*Rosmarinus officinalis*), combined with the organic volatile oil steam-distilled from the best quality dried fruits of fennel (*Foeniculum vulgare*). Carefully chosen top quality organic vegetable oil has been used as the carrier.

Danox Preservative 8000 is designed for powder applications. Recommended dosage of Danox Preservative 8000 Organic is minimum 5000 ppm. At recommended level of dosage, the final product will have no characteristic taste, smell, colour or odour generally associated with Rosemary extracts.

Product code, INCI Name and CAS No.

Product code:	511201	
INCI name:	Helianthus Annuus Seed Oil	Rosmarinus officinalis leaf extract
CAS no.:	8001-21-6	84604-14-8/8000-25-7
EINECS no:	232-273-9	283-291-9
INCI name:	Foeniculum Vulgare Fruit Oil	
CAS no.:	84625-39-8	
EINECS no:	283-414-6	

Specifications

Appearance:	Dark yellow to brownish opaque oil
Odour:	Slightly characteristic
Water:	Max 0.5%

Use in Cosmetics

Danox Preservative 8000 Organic is used as a very strong preservative, specifically designed to protect powders against oxidation and loss of antioxidants. Its powerful antimicrobial properties will also help to inhibit the growth of pathogenic microorganisms, avoiding spoilage of both food and cosmetic ingredients. Therefore, the addition of Danox Preservative 8000 Organic at recommended level of dosage will increase dramatically the stability and shelf life of cosmetic products. This natural blend could be used as replacement for chemical additives and synthetic antimicrobial agents, enabling Danox Preservative 8000 Organic to be included in natural and organic products.

Storage

Keep in a cool (preferably below 5 to 10°C, the cooler the better), dark and dry store-room.

Shelf Life

Under optimal storage conditions, in original unopened drums/containers, minimum five years.



Contact Information

For more information about any of ICSC's products, please contact one of our team.

We are only one email away!

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