



FINNSUSP

BELIEVE  
WHAT YOU SEE.  
EXCEPTIONAL  
PRODUCTS  
CAN BEAT  
DRY EYE.





# AN INNOVATIVE FAMILY OF MEDICAL DEVICE PRODUCTS

## TARGET THE ROOTS OF DRY EYE DISEASE

The prevalence of dry eye is growing worldwide. However, it may still often remain underdiagnosed and treated unsatisfactorily. Successful management of the disease calls for understanding of the mechanisms underlying its onset and progression, and of the causative factors. Finnsusp Oy has developed five preservative-free, CE-marked medical device (OTC) products to face the challenge of dry eye as defined in the most recent scientific evidence.

### WHAT IS DRY EYE REALLY?

As understood for a long time, dry eye is '*a multifactorial disease*' meaning that there are always several factors maintaining the disease at the same time. The most comprehensive and recent definition comes from The Tear Film and Ocular Surface Society's Dry Eye Workshop II (TFOS DEWS II; [www.tearfilm.org](http://www.tearfilm.org)).

The TFOS DEWS II definition is shown in Figure 1 as a graphical interpretation. The graph depicts that a variety of environmental/extrinsic (air pollution, wind, etc.), intrinsic (age, diseases) and iatrogenic (drugs, contact lens wear, ocular surgery) causative factors are conveyed to one common etiologic factor pathway. The three important etiologic factors generate and feed each other, creating a continual *vicious circle* on the ocular surface<sup>1,2</sup>. Ocular symptoms related to visual acuity, discomfort and deficient lubrication derive from this adverse condition causing nociceptive or neuropathic pain<sup>1,3,4</sup>.

Product development is based on the most recent scientific evidence.

To summarize, dry eye is an ocular surface disease that is maintained by three main etiologic factors:

1. **tear film instability,**
2. **tear film hyperosmolarity, and**
3. **ocular surface inflammation and damage.**

## BREAKING THE CIRCLE - PROVEN BY CLINICAL STUDIES

### DEMET® MICROEMULSION TRIAL

Finnsusp has created the patented DEMET® microemulsion technology for enhanced properties that benefit natural tear film functionality. In combination with the highly effective and safe constituents a trehalose and high-molecular-weight hyaluronic acid (HA), the DEMET® microemulsion eye drop (see p. 6) represents a break-through product with physiologically unique surface tension and viscosity to support tear film function and to target each of the three etiologic factors simultaneously. Luckily, all factors in the dry eye *vicious circle* (Figure 1) are easy to measure. The clinical trial took place at the Department of Ophthalmology, Kuopio University Hospital, Kuopio, Finland<sup>5</sup>. This was a randomized, quadruple-masked and active-controlled clinical trial in which 64 adult patients with moderate or severe dry eye using DEMET® microemulsion eye drops or 0.2% HA eye drops (see p. 4) for up to 30 days.

As shown in the next pages, the design approach was a total success. DEMET® microemulsion was able to make clinically meaningful and statistically significant improvements in each etiologic factor within 30 days of daily treatment. The 0.2% HA eye drop represented a more

traditional-type eye drop with one active agent only, and it showed improvements in the same factors but with smaller changes. Surprisingly, the products were equally effective in reducing hyperosmolarity of tears to the safe level by 10 days already. They also significantly decreased ocular symptoms to an extent very rarely seen in any clinical trial. No adverse effects or side-effects were observed.

Concluded in the peer-reviewed report of the trial,<sup>5</sup> the stressful *vicious circle* of dry eye can be disrupted by stabilizing the tear film and by normalizing tear osmolarity, followed by healing of the damaged ocular surface. The key is the continuous biophysical protection of the ocular surface that the unique multi-ingredient DEMET® microemulsion eye drop has to offer.

### SEA BUCKTHORN SEED OIL SPRAY TRIAL

The sea buckthorn seed oil eye spray (SB Spray, see p. 8) was developed by Finnsusp as an easy alternative to eye drops. Also based on DEMET® microemulsion technology, it strengthens the tear film lipid layer and takes care of the skin surrounding the eyes. The SB spray trial was conducted at Turun Silmäexpertit Oy, Turku, Finland<sup>6</sup>. This was a randomized, investigator-masked, controlled study in 52 adult patients with moderate or severe dry eye. Depending on the study part, the patients used SB Spray for 1, 9, or 45 days. The active control was a liposomal spray with soy lecithin. As shown in this brochure, SB Spray reduced ocular symptoms significantly more than the control treatment. Sensations of eye dryness and watering were significantly lowered. The spray was well tolerated with no significant adverse effects.

### VALIDATED CLINICAL PERFORMANCE AND SAFETY

The Finnsusp range of dry eye products are CE-marked medical devices that take advantage of the clinical data from the DEMET® microemulsion and SB Spray trials, demonstrating clinical performance and safety. Currently comprising three eye drop and two eyelid spray products, the product family guarantees an efficient and safe option for every need in treating dry eye.

All products are safe to use while wearing contact lenses. The products do not contain any ingredients of animal origin and they have not been tested on animals.

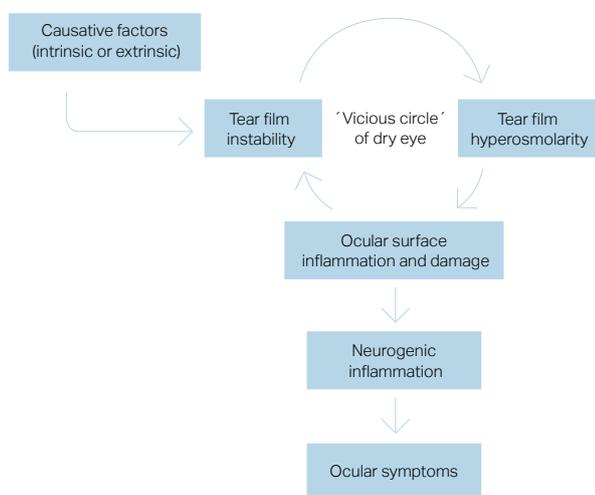


FIGURE 1. The *vicious circle* of dry eye on the ocular surface and its pathway to symptoms<sup>5,7</sup>.

# EYE DROP WITH HYALURONIC ACID SEASONAL MOISTURIZER

The comfort eye drop intended for relieving seasonal symptoms of irritation, dryness and burning of the eyes. The product relieves dryness caused by contact lens wear and increases the comfort of contact lens wear.

The water-binding, protective and lubricating properties of hyaluronic acid relieve the symptoms of dry eye caused by environmental factors such as dry air, wind, smoke, air pollution, intensive light, as well as by ocular surgery, allergies, or contact lens wear. The simple yet efficient composition of the moisturizing eye drop also relieves eye strain caused by mobile device use, visual display unit work, reading and driving<sup>5</sup>.

In a clinical trial carried out on this 0.2% hyaluronic acid containing product, it was found that the hyperosmolarity of the tear film of dry eye patients returned to a safe, normal level (< 308 mOsm/l) (Figure 2), and the damage to and inflammation of their ocular surfaces started to heal. Similarly, the patients' Ocular Surface Disease Index (OSDI) score decreased significantly (Figure 3)<sup>5</sup>.

The product is particularly well-suited for sensitive eyes, and it has been awarded the Allergy Label by the Allergy, Skin and Asthma Federation in Finland (see p. 12). These eye drops can be applied to contact lenses before the lenses are put in the eyes, or they can be applied directly to the eye during contact lens wear in order to increase the comfort of contact lens wear.



**ACTIVE INGREDIENTS:** hyaluronic acid (medium-molecular-weight)

**COMPOSITION:** 0.2% hyaluronic acid, sodium chloride, disodium hydrogen phosphate, sodium dihydrogen phosphate, purified water. A sterile, isotonic and low-phosphate buffer solution. Contains no preservatives or materials of animal origin.

**APPLICATION:** 1–2 drops to the eye 2–3 times a day or when needed. Alternatively, 1 drop on a contact lens before inserting it into the eye.

**SHELF LIFE:** 6 months from opening

**PACKAGE:** 10 ml / 250 drops. Due to intentional overfill, a small volume of solution will remain in the dispenser.

**ALLERGY LABEL PRODUCT:** Suitable for sensitive eyes.

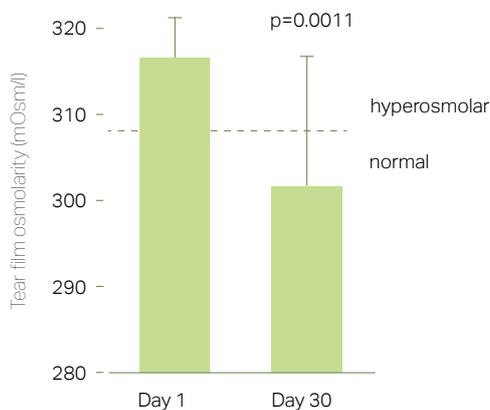


FIGURE 2. Osmolarity of the tear fluid in patients with hyperosmolarity ( $\geq 308$  mOsm/l) (mean + SD, n=14, ANOVA)<sup>5</sup>.

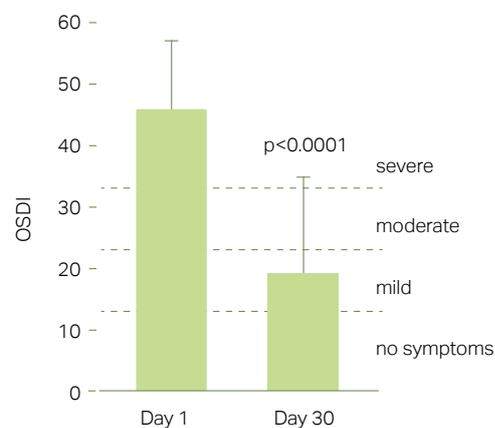


FIGURE 3. Dry eye symptoms (mean + SD, n=26, scale 0-100, ANOVA)<sup>5</sup>.

# EYE DROP WITH TREHALOSE AND HIGH-MOLECULAR-WEIGHT HYALURONIC ACID INTENSIVE MOISTURIZER

The highly effective moisturizing eye drop is intended for relieving the symptoms of moderate and severe dry eye.

The unique and well-known moisturizing, protective and lubricating properties of trehalose and hyaluronic acid were combined to create an intensive moisturizer formulation that will bring tear film osmolarity down to a harmless level and help the ocular surface recover from damage and redness.

The 2% trehalose concentration was selected to effectively boost the therapeutic action of the high-molecular-weight hyaluronic acid that stabilizes the tear film and offers a long-lasting moisturizing experience on the ocular surface<sup>7</sup>. The product relieves the symptoms of dry eyes – irritation, itching, and foreign body sensations in the eyes – caused by environmental factors such as dry air, wind, smoke, air pollution and intensive light, as well as by ocular surgery, allergies or contact lens wear<sup>8</sup>.

The composition of this highly effective eye drop promotes good vision, relieving eye strain caused by activities such as mobile device use, visual display unit work, reading and driving<sup>5,8</sup>. The product is suitable for sensitive eyes, and it has been awarded the Allergy Label (see p. 12). The intensive moisturizer can be used with contact lenses without any need to remove the lenses from the eyes.



**ACTIVE INGREDIENTS:** trehalose and hyaluronic acid (high-molecular-weight)

**COMPOSITION:** 2% trehalose, 0.25% high-molecular-weight hyaluronic acid, sodium chloride, disodium hydrogen phosphate, sodium dihydrogen phosphate, purified water. A sterile, isotonic and low-phosphate buffer solution. Contains no preservatives or materials of animal origin.

**APPLICATION:** 1–2 drops to the eyes 1–3 times a day or when needed.

**SHELF LIFE:** 6 months from opening

**PACKAGE:** 10 ml / 240 drops. Due to intentional overfill, a small volume of solution will remain in the dispenser.

**ALLERGY LABEL PRODUCT:** Suitable for sensitive eyes.



## WHY USE TREHALOSE WITH HIGH-MOLECULAR-WEIGHT HYALURONIC ACID?

Trehalose is now hot in medicine. This natural small-molecule disaccharide sugar shows exceptional bioprotective and therapeutic properties with an absolutely clean safety record. Scientific evidence strongly suggests that trehalose can directly act against each factor of the *vicious circle* of dry eye shown in Figure 1.

Hyaluronic acid is another natural molecule, a polysaccharide ranked with the best comfort-promoting properties among polymer agents commonly used in eye drops.

It is both the high molecular weight (i.e. long chain length) and the high concentration that bring about all clinical benefits of hyaluronic acid in the eye, including an extended ocular residence time.

Combined with trehalose, the ocular surface can recover and maintain the healthy homeostasis. Minimizing chances for a return to the adverse condition is the goal of dry eye management.

(Read more details with references to original publications in ref. 7, an open-access review article.)

# DEMET® MICRO-EMULSION EYE DROP

## TREATS AND PREVENTS SYMPTOMS AND SIGNS

The long-acting and moisturizing lipid microemulsion eye drop is intended for treating and preventing symptoms and signs of moderate and severe dry eyes.

This innovative eye drop has several active ingredients: sacha inchi seed oil, trehalose, hyaluronic acid and glycerol. The microemulsion product is designed to counteract all three factors that maintain dry eye (Figure 1). Hyaluronic acid, trehalose and glycerol bind water, stabilize and lubricate the tear film and keep tear osmolarity at a healthy level. Sacha inchi seed oil strengthens the tear film lipid layer and restores its rapid spreading. Together with high-molecular-weight hyaluronic acid, they help keep the protective tear film intact on the ocular surface for long periods of time. The active ingredients also have well-known antioxidative properties that help cells recover from inflammatory damage. After the inflammation resolves, redness in the conjunctiva decreases.

The results of the clinical trial<sup>5</sup> conducted on this product show that it works as intended. Administering of the emulsion eye drops according to the instructions will strengthen the tear film into a durable protective layer on the ocular surface that no longer breaks up in between blinks (OPI >1, Figure 4). Once the osmolarity of the tear film is restored to a healthy level (< 308 mOsm/l) (Figure 5), the damage to the ocular surface is repaired (Figure 6). Severe dry eye symptoms will decrease significantly within 10–30 days (Figure 7)<sup>5</sup>.

Produced by the patented DEMET® technology developed by Finnsusp, the microemulsion is an optically clear solution with an optimal viscosity and surface tension for the eyes: the bottle does not have to be shaken, and the solution will not blur vision. One drop is 30 µl, which stays in the eye. The potassium content and ratio of omega-6/omega-3 unsaturated fatty acids correspond to the healthy tear fluid. The product is suited for use with contact lenses; the lenses need not be removed from the eyes. Trehalose emulsion eye drop is one of the Allergy Label products of Finnsusp.



**ACTIVE INGREDIENTS:** sacha inchi seed oil, trehalose, hyaluronic acid (high-molecular-weight) and glycerol.  
**COMPOSITION:** 0.1% sacha inchi (*Plukenetia volubilis*) seed oil, 2% trehalose, 0.2% high-molecular-weight hyaluronic acid, 0.9% glycerol, trometamol, citric acid, potassium chloride, sorbitan mono-oleate and polysorbate 80. A sterile and hypotonic microemulsion solution. Contains no preservatives, alcohol, phosphates, borates, mineral oil or materials of animal origin.  
**APPLICATION:** 1 drop to each eye 3–4 times a day.  
**SHELF LIFE:** 6 months from opening  
**PACKAGE:** 10 ml / 300 drops. Due to intentional overfill, a small volume of solution will remain in the dispenser.  
**ALLERGY LABEL PRODUCT:** Suitable for sensitive eyes.

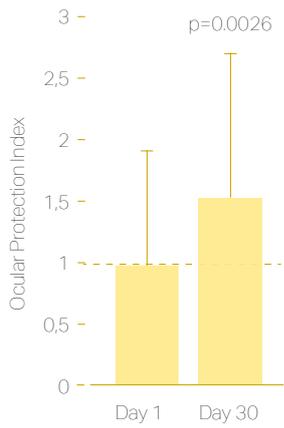


FIGURE 4. Ocular Protection Index (OPI) (mean + SD, n=26, ANOVA)<sup>5,6</sup>. OPI > 1: the tear film break up time is longer than the blink interval<sup>5</sup>.

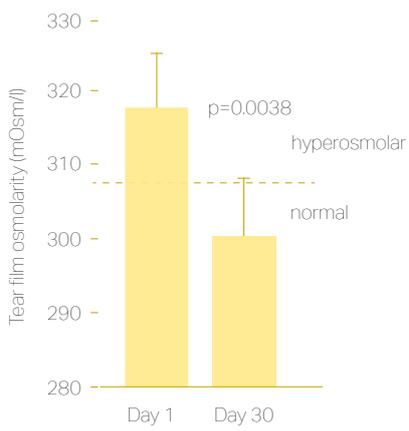


FIGURE 5. Osmolarity of the tear fluid in patients with hyperosmolarity ( $\geq 308$  mOsm/l) (mean + SD, n=8, ANOVA)<sup>5</sup>.

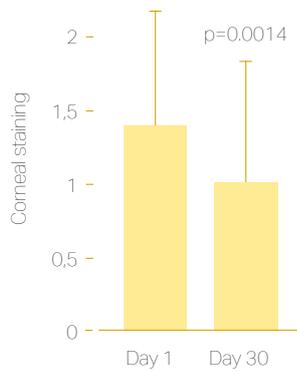


FIGURE 6. Corneal staining (mean + SD, n=24, Oxford scale 0–5, Wilcoxon signed rank test)<sup>5</sup>.

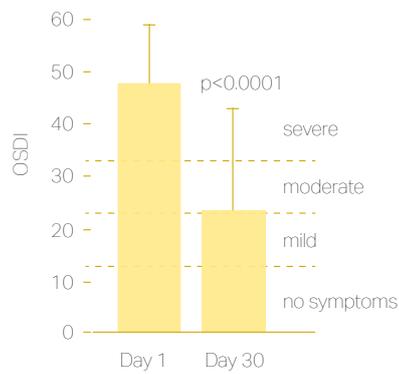


FIGURE 7. Dry eye symptoms (mean + SD, n=26, scale 0–100, ANOVA)<sup>5</sup>.



# SEA BUCKTHORN SEED OIL SPRAY (SB SPRAY)

## REFRESHING SPRAY FOR DRY EYES AND EYELIDS

The advanced lipid microemulsion eye spray is intended for treating and preventing dry eye symptoms as well as for moisturizing the eyelids and the skin around the eyes. The spray is an easy-to-use moisturizer for people who find it difficult to apply moisturizing eye drops and also on the road, when instant relief is needed.

The SB spray is applied to closed eyes. The microemulsion, which contains sea buckthorn seed oil, spreads onto the ocular surface with every blink, strengthening the protection provided by the natural tear film lipid layer and preventing evaporation of the tear fluid. Thanks to its special composition, SB spray stays well on the ocular surface and spreads evenly. Significant alleviation of dry eye symptoms has been clinically proven (Figures 8 and 9)<sup>6</sup>.

The spray relieves and prevents irritation, dryness, burning and watering of the eyes caused by various environmental factors such as dry air, wind, smoke, air pollution, intensive light, as well as by ocular surgery, allergies or contact lens wear. Hyaluronic acid, glycerol and the natural antioxidants and omega-fatty acids of sea buckthorn seed oil protect the ocular surface and the skin around the eyes from cellular damage caused by drying and speed up their healing. Hyaluronic acid and glycerol also bind water and moisturize the ocular surface. The microemulsion eye spray refreshes eyes that are strained due to mobile device use, visual display unit work, reading or driving. It can be used with contact lenses and eye make-up.



**ACTIVE INGREDIENTS:** Sea buckthorn seed oil, hyaluronic acid (medium-molecular-weight) and glycerol  
**COMPOSITION:** Sea buckthorn (*Hippophae rhamnoides*) seed oil, hyaluronic acid, glycerol, trometamol, citric acid, sodium chloride, potassium chloride, sorbitan mono-oleate and polysorbate 80. A sterile and hypotonic microemulsion solution. Contains no preservatives, alcohol, phosphates, borates, mineral oil or materials of animal origin.  
**APPLICATION:** 1–2 doses on closed eyes from a distance of 15–20 cm as needed.  
**SHELF LIFE:** 6 months from opening  
**PACKAGE:** 17 ml / 300 doses. Due to intentional overfill, a small volume of solution will remain in the dispenser.

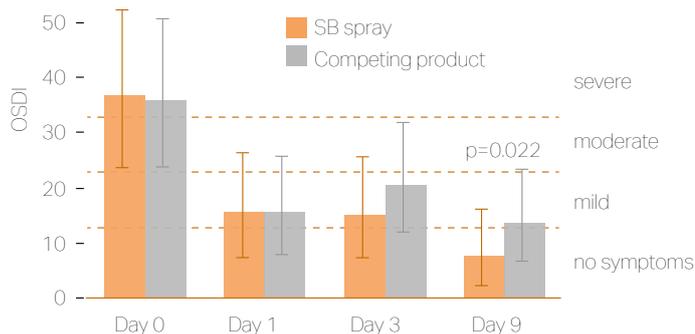


FIGURE 8. Dry eye symptoms on days 1–9 (estimate of the mean and 95% confidence intervals, n=10–11, scale 0–100, Stuart-Maxwell/Wilcoxon signed rank test on the difference between changes)<sup>6</sup>.

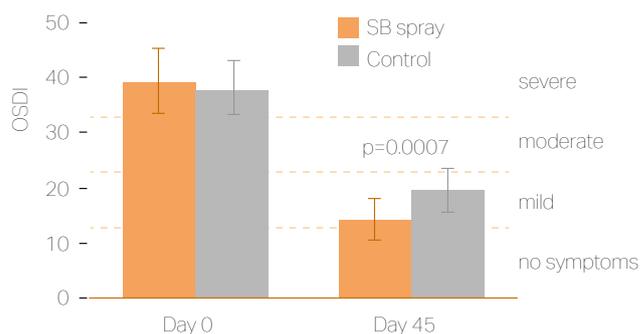


FIGURE 9. Dry eye symptoms after the 45th day (mean estimate and 95% confidence intervals, n=39–45, scale 0–100, Stuart-Maxwell/Wilcoxon signed rank test on the difference between changes)<sup>6</sup>.

# OMEGA EYE SPRAY TREATS AND PREVENTS SYMPTOMS AND SIGNS

The innovative lipid microemulsion eye spray is intended for treating and preventing symptoms and signs of dry eye as well as for moisturizing the eyelids and the skin around the eyes. Produced by the patented DEMET® technology, the unique microemulsion composition with several active ingredients has been designed to act against all etiologic factors of dry eye (Figure 1). The spray is easy to dose on the closed eyes. Sacha inchi seed oil - rich in unsaturated omega-fatty acids - gradually migrates on the ocular surface. The oil strengthens the tear film lipid layer to retard evaporation of the tears and restores tear film stability and spreading required for normal tear function. Low osmolarity of the formulation helps keep tear film osmolarity at a safe level. Trehalose, dexpanthenol and glycerol bind water and stabilize and lubricate the tear film. Dexpanthenol (provitamin B5) and glycerol, as well as natural antioxidants and omega-fatty acids of sacha inchi seed oil, protect the ocular surface and the skin around the eyes from cell damage and inflammation caused by drying and speed up healing. Redness of the conjunctiva decreases and the eyes feel more comfortable as soon as the ocular surface recovers from inflammatory damage.

The lipid microemulsion refreshes the eyes and improves the vision in eye-straining situations such as in dry air, when using mobile devices and other digital displays, reading and driving. The spray can be used with contact lenses and eye make-up.



**ACTIVE INGREDIENTS:** Omega oil, trehalose, glycerol and dexpanthenol (provitamin B5)

**COMPOSITION:** Sacha inchi (*Plukenetia volubilis*) seed oil, trehalose, glycerol, dexpanthenol (provitamin B5), trometamol, citric acid, potassium chloride, sorbitan mono-oleate and polysorbate 80.

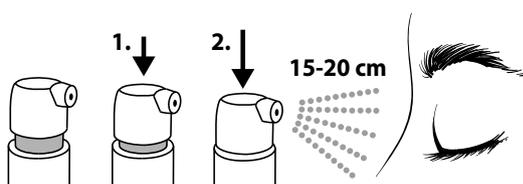
A sterile and hypotonic microemulsion solution. Contains no preservatives, alcohol, phosphates, borates, mineral oil, or materials of animal origin.

**APPLICATION:** 1–2 doses on closed eyes from a distance of 15–20 cm as needed.

**SHELF LIFE:** 6 months from opening

**PACKAGE:** 17 ml / 300 doses. Due to intentional overfill, a small volume of solution will remain in the dispenser.

**ALLERGY LABEL PRODUCT:** Suitable for sensitive eyes.



Both eye spray products are used by application on closed eyes.

1. Press down the dispenser halfway.
2. Hold the dispenser 15–20 cm from the eyes. Make sure the nozzle points towards your face.
3. Close both eyes, press down the dispenser all the way and apply 1–2 sprays on the eyelids. The sprayer mechanism provides uniform spray distribution on the eyes.
4. Put the protection cap back on the nozzle head.

# INNOVATIVE MULTI-DOSE DISPENSER FOR PRESERVATIVE-FREE EYE DROPS

The multi-dose dispensers used in all Finnsusp eye drop products are based on Ophthalmic Squeeze Dispenser (OSD) technology developed for preservative-free formulations. This technology meets the strictest integrity requirements and protects the bottle's contents from microbial contamination throughout the product's life cycle.

The actuation force required for drop ejection is low, and the size of each drop is optimal with every formulation. The nozzle's fluid path is completely metal-free, and all materials are of pharmaceutical grade. The nozzle and bottle do not contain any materials that would release silver ions into the eye, which ensures that the product is also safe for users with more sensitive eyes.

The OSD system has been extensively tested for optimized performance with each eye drop formulation. All test data indicate that sterility is maintained during use and storage at least until the discard date.

## ADVANTAGES OF THE SHORT NOZZLE

The combination of a short nozzle and a ventilated protection cap prevents microbial growth in the nozzle and in the cap throughout the product's life cycle. No chemical antimicrobial substances are needed in the system. Each produced drop is sterile and preservative-free.

In the trehalose–hyaluronic acid and trehalose emulsion eye drop bottles, there is a special liner pad inside the cap ensuring the product's function and safety.



## GENERAL APPLICATION INSTRUCTIONS

THE OSD IS RATHER A SOFT DISPENSER COMPARED TO MANY OTHERS OF SIMILAR USE ON THE MARKET. THEREFORE, ONLY A GENTLE SQUEEZE IS REQUIRED TO PRODUCE A DROP. AS SOON AS PRESSURE IS RELEASED, TIP OF THE ORIFICE CLOSSES AND NO DROPS ARE RELEASED. WHEN VOLUME OF THE PRODUCT DECREASES, IT IS ADVISABLE TO HOLD THE DISPENSER BY ITS MIDDLE AND SQUEEZE SLIGHTLY HARDER. THE USER CAN ALWAYS CHECK THE REMAINING AMOUNT OF THE PRODUCT THROUGH THE SEMI-TRANSPARENT BOTTLE.

1. First-time use: Tear off and discard the seal of the cap. Open the cap.
2. Gently squeeze the bottle in a tip-down position until a drop falls out.
3. Apply according to the instructions. Do not let the bottle tip touch the eye or other surfaces.
4. Shake the remaining drop left at the tip of the nozzle away and close the cap.
5. Use within six months from opening the bottle and by the expiry date.

Due to intentional overfill, a small volume of solution will remain in the dispenser.

# ADVANCED TECHNOLOGY GUARANTEES SAFETY

The dispenser used for Finnsusp's eye sprays is based on Advanced Preservative Free PLUS (APF+) technology, which protects the preservative-free solution from microbial contamination.

The tip seal of the spray nozzle closes immediately after application and blocks any inward airflow. The shrinking bag inside the bottle protects the formulation from oxygen and microbes throughout the product's life cycle.

## FULL 360° FUNCTION

The dispenser provides unique 360° application in any position; this is a great advantage when applying the spray to another person.

Due to intentional overfill, a small volume of solution will remain in the dispenser.



## OSD IS DESIGNED FOR PRESERVATIVE-FREE FORMULATIONS

THE TIP SEAL MECHANISM CLOSSES THE ORIFICE IMMEDIATELY WHEN RELEASING THE PRESSURE, THUS PREVENTING CONTAMINATION THROUGH THE TIP.

SUITABLE FOR OXIDATION-SENSITIVE FORMULATIONS DUE TO METAL FREE FLUID PATH.



THE AIR REQUIRED TO COMPENSATE THE VOLUME LOSS IN THE BOTTLE AFTER ACTUATION IS FILTERED THROUGH A PTFE MULTILAYER MEMBRANE TO GUARANTEE STERILITY.

# WE ARE AT YOUR SERVICE

## BUILDING YOUR OWN BRAND

Finnsusp's preservative free dry eye products are available as own brand labelled (OBL) products. Finnsusp manufactures today dozens of global OBL products which are sold worldwide.

This is a service which we are happy to provide to our partners who want to build, expand and be successful with their eye care portfolio together with our globally unique, preservative-free formulations.

In addition, Finnsusp dry eye products are also available as our in-house brands – PuroSilmille® and Piiloset BioDrop MD®.

## SERIALIZATION AND AGGREGATION

Today, serialization and aggregation processes for Medical Devices are mandatory in only some market areas. However, the legislation is changing and manufacturers need to have these processes in place in order to meet these requirements in the near future.

- Serialization involves adding a Unique Device Identification (UDI) code to each product
- Aggregation builds a parent-child relationship from pallet to case to individual pack-level products.

Finnsusp's packing line is built to provide both serialization and aggregation processes for your current and future needs.

## TAMPER-EVIDENT SEALING

In case you want to emphasize the safety of your product, or a sealed packaging is required in your market area, Finnsusp has tamper-evident sealing process in place. Tamper-evident seals are placed on top and bottom of the box to detect unauthorised access to the product.

## GENTLE ALLERGY LABEL PRODUCTS FOR SENSITIVE EYES

All Finnsusp's dry eye drops and Omega eye spray are Allergy Label products - thus suitable for even the most sensitive eyes.

Allergy Label is granted by the Finnish Allergy, Skin and Asthma Federation, an independent organization aiming to improve the lives of people suffering from allergies, asthma and skin conditions. Allergy Label products have undergone a thorough evaluation by demanding specialists of the Allergy, Skin and Asthma Federation and found not to contain generally irritating ingredients.



IN CO-OPERATION WITH  
ALLERGY, SKIN AND  
ASTHMA FEDERATION



PUROSILMILLE® IS ONE OF FINNSUSP'S ORIGINAL BRANDS SOLD IN FINLAND. PURO MEANS A STREAM IN ENGLISH AND IT TAKES THOUGHTS TO PURE FINNISH NATURE AND PURE WATER.

The clinical results of the SIME clinical trial convincingly demonstrate that all key factors of dry eye on the ocular surface can be efficiently treated at the same time, by using the novel multi-ingredient trehalose emulsion eye drop formulation. The outpatient participants from our clinic were mostly with severe dry eye disease, but they showed consistent improvement in tear film stability, tear osmolarity and markers of ocular surface damage and inflammation, and reduced symptoms. Also, the control eye drops with hyaluronic acid alone were surprisingly effective in reducing tear hyperosmolarity and the symptoms. Both preservative-free eye drops were also without any ad-

verse effects in the study. Trehalose emulsion eye drops reached a waited state of homeostasis and provides a novel option to treat dry eye disease.

Kai Kaarniranta, Prof., MD, PhD  
 Department of Ophthalmology, Institute of Clinical Medicine, University of Eastern Finland, Kuopio, Finland, and Department of Ophthalmology, Kuopio University Hospital, Kuopio, Finland.



We have maintained an over ten-year business relationship with Finnsusp Oy. Finnsusp is an innovative company with strong in-house Research and Development department. Our customers love their contact lens care solutions, eye drops and eye spray. The Greek customers appreciate that none of their products is tested on animals. We value their friendly and customer-oriented attitude that enables us to meet the local market needs.

We are happy to continue cooperating with such a reliable partner that is committed to sustaining the high standard services to us and our clientele.

Aris Nikolaidis  
 Managing Partner, The Eyewear Company, Greece



PILOSET BIODROP MD®, ALSO AN ORIGINAL BRAND OF FINNSUSP, COMPRISES TWO EYEDROP PRODUCTS AND ONE EYE SPRAY.



My daily experience with Renova® Tre (trehalose/HA emulsion eye drop) is exciting: the best formulation, even for the worst ocular surfaces! The very good quality hyaluronic acid, due to the ideal combination between its high molecular weight, concentration and viscosity, makes it very comfortable and persistent; in addition, trehalose bioprotects corneal epithelium from the hyperosmolarity of the tear film and from dehydration.

Renova® Tre is a great preservative-free combo-solution for a wide range of my patients: from post-surgery to dry eye, from VDU users to contact lens wearers. Recommended!

Giulia Mandelli  
MD, Ophthalmologist, Milan, Italy

I feel many people with dry eyes find it difficult to administer drops. Since the introduction of spray it has given customers an option. The spray has been really popular with those with dexterity issues and to be honest, those who just don't want the hassle of using drops or drops running down the side of the face due to poor administration techniques.

Kaushal Patel, Pharmacist  
First Pharmacy, Wallington, UK.



FINNSUSPISARENOWNEDMANUFACTUREROFOBLPRODUCTS.TODAY,THEREAREDOZENSOFBLBRANDSSOLDWORLDWIDE.

# FIVE CE MARKED MEDICAL DEVICE (OTC) PRODUCTS TO TARGET THE ROOTS OF DRY EYE



<b>OBJECT OF EFFECT</b>					
Strengthens the tear film	●	●	●	●	●
Lowers hyperosmolarity	●	●	●		●
Repairs damage to the ocular surface		●	●		●
Reduces redness of the ocular surface		●	●		●
Also nourishes the skin around the eyes				●	●
<b>TYPE OF SYMPTOM</b>					
Effective against seasonal symptoms	●	●		●	●
Effective against continuous symptoms		●	●	●	●
Prevents symptoms (prophylactic effect)			●	●	●
Improves vision even in demanding conditions			●		●
Developed to improve the comfort of contact lens wear	●			●	●
Relieves eye fatigue caused by mobile device use, driving or reading	●	●	●	●	●
Reduces watering of the eyes			●	●	●
<b>USABILITY</b>					
Applied as eye drops (eye open)	●	●	●		
Applied as an eye spray (eye closed)				●	●
Can be used with contact lenses	●	●	●	●	●
Use within 6 months from opening	●	●	●	●	●
Allergy Label product	●	●	●		●
Contains no preservatives, alcohol, borates, mineral oil or materials of animal origin.	●	●	●	●	●
Long-acting, thanks to high-molecular-weight hyaluronic acid		●	●		

## THE BEST FOR YOUR EYES

Finnsusp Oy, a family company, is well-versed in the well-being of eyes. The company has been developing, testing and manufacturing Medical Devices; eye care products, contact lens care solutions and spectacle lenses, for more than four decades. The clinically tested, efficient and gentle eye drops and eye sprays utilize natural ingredients and the latest scientific research results. Finnsusp's product development is guided by innovation, high quality, avoidance of preservatives and eye-friendliness. The products are being sold in over 30 countries around the world.

## ADVANCED R & D

Finnsusp Oy has an in-house R & D department of experienced specialists who are devoted to developing innovations and state-of-the-art formulations. The company collaborates with ophthalmologists, University of Turku, University of Eastern Finland and University of Helsinki, Kuopio University Hospital, VTT Technical Research Centre of Finland Ltd, Turku University of Applied Sciences, the Allergy, Skin and Asthma Federation in Finland and others. Results of R & D have been published in BCLA Clinical Conference and Exhibition, SOE Congress, EVER Congress and in peer-review journals.

## RESPONSIBLY MANUFACTURED IN FINLAND

Finnish origin is an important value for Finnsusp Oy. All products are manufactured at the company's own factories in Finland as resource-efficiently and environmentally friendly as possible. All plastic and carton waste are recycled or reused as energy and packing materials are digitally printed to reduce paper waste. Finnsusp solar panels on the roofs of its properties, generate clean CO<sub>2</sub>-free solar energy e.g. for production purposes.

## HIGH QUALITY IS THE TOP PRIORITY

Product development, manufacturing and sale of CE marked Medical Devices is closely regulated by international directives, regulations and standards. Finnsusp Oy is ISO 13485:2016, MDSAP and Brazilian GMP certified, and it is successfully inspected by US FDA.

# FINNSUSP

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