

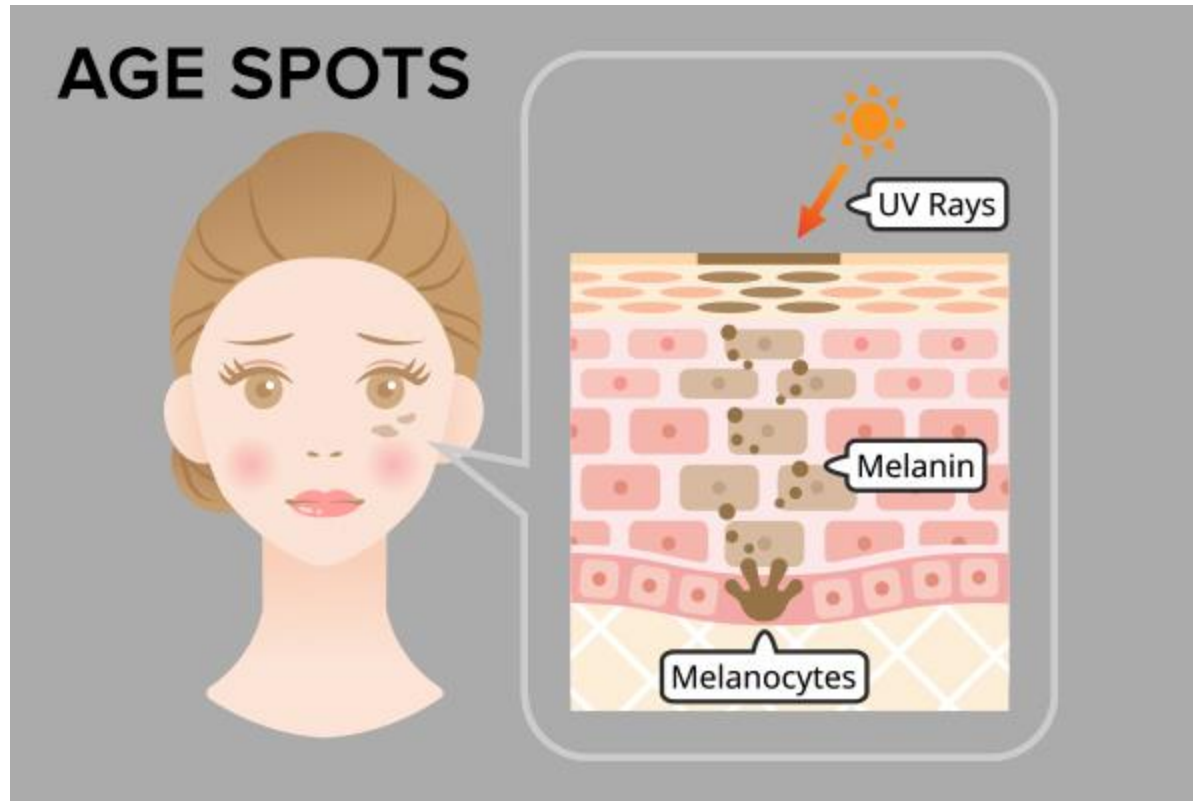
AGE SPOT PATCH - HYDROGEL PATCH

WOOSHIN LABOTTACH CO., LTD.

ABOUT AGING SPOT

The aging spot in the skin can be generated by UV radiation.

When the skin is exposed in UV radiation, melanin cells which has black color can be generated in the skin. The melanin pigmentation change the color of skin to black spot.



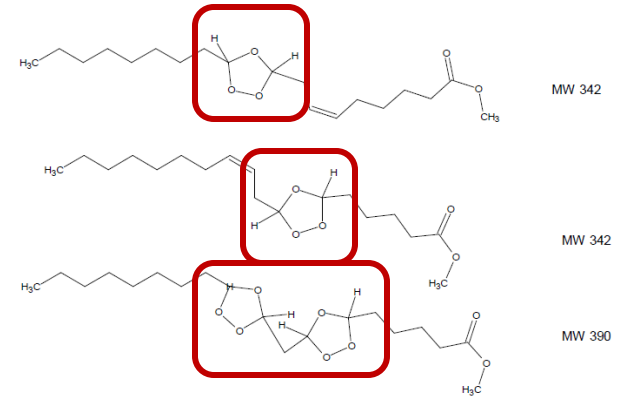
INGREDIENT PROPERTIES OF OZONATED OIL

Principle

oleic acid



linoleic acid



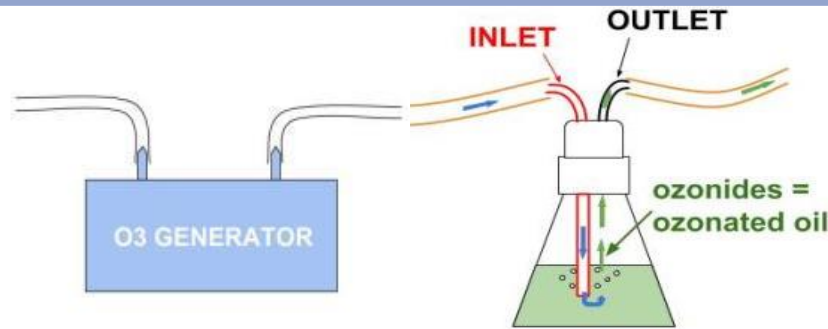
How to make

**OXYGEN
(O₂)**

oxygen

+

ozone generator



oil bubbler

- Unsaturated fatty acid can be combined with oxygen
- Ozonated oil can release oxygens from combining structure
- Long shelf-life (6 months ~ 2 years)

THE BENEFITS AND MARKETABILITY OF OZONATED OIL

Benefits

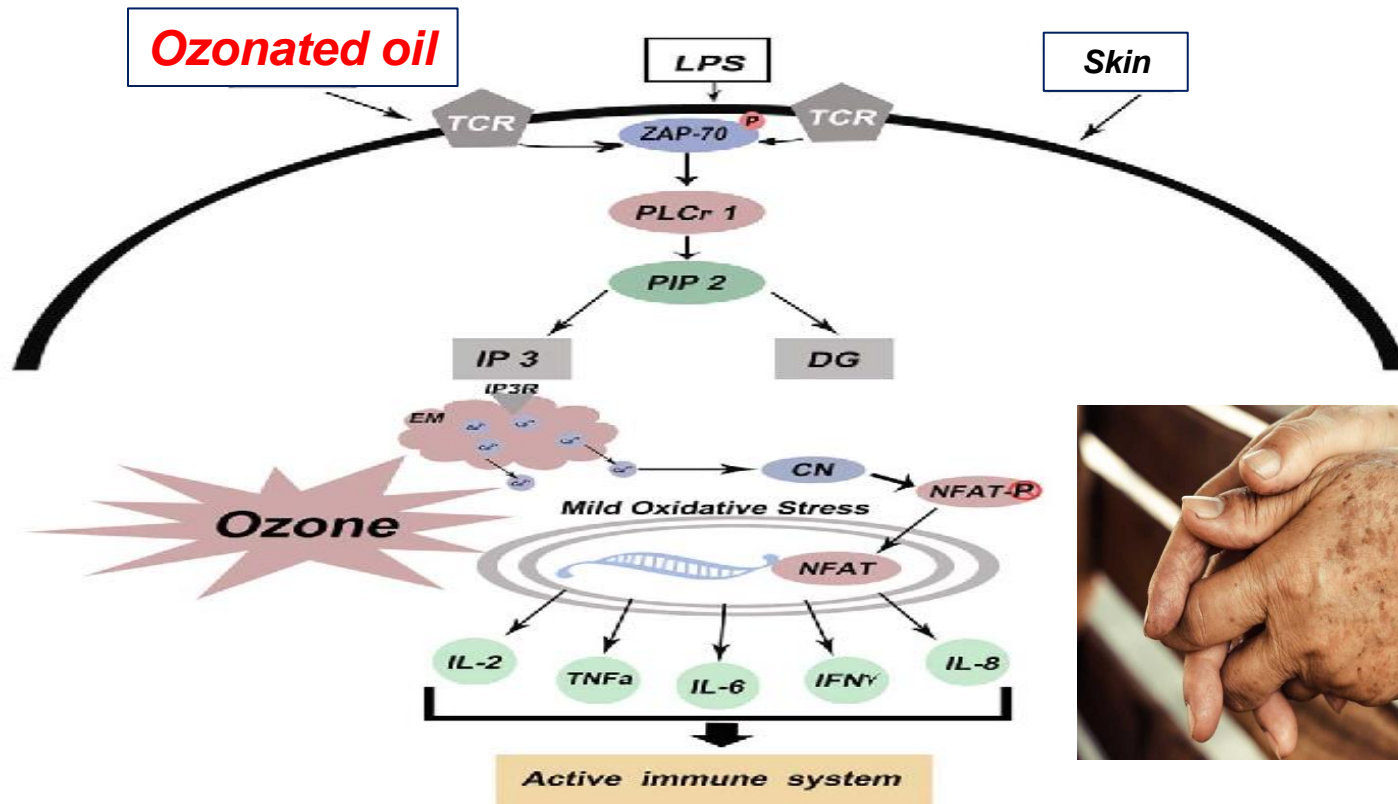
1. Whitening skin and teeth
2. Strong antibacterial, antiviral and antifungal activity
3. Healing skin disease and scar
4. Anticancer

Marketability

Ozonated oil is officialy registance for therapy in many countries such as Korea, USA, Germany, France, Japan etc.



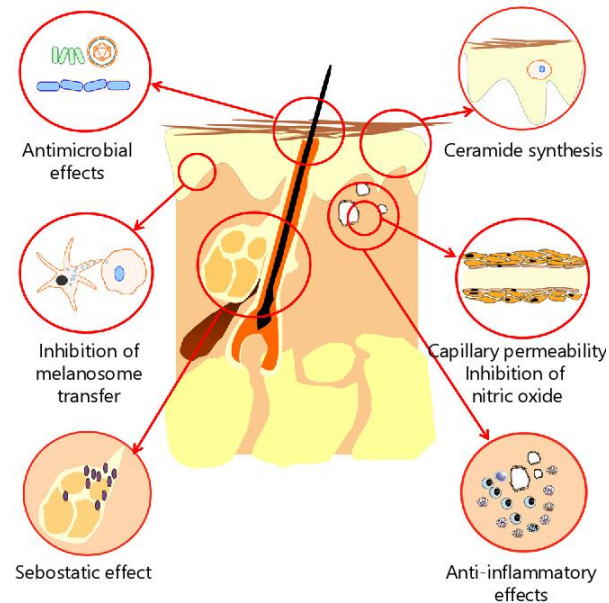
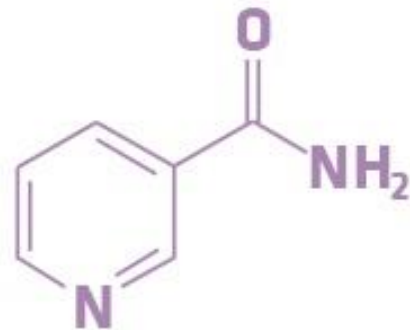
MECHANISM OF OZONE THERAPY FOR SKIN WHITENING



1. When ozonated oil is applied on age spot, the ozonated oil through skin can release the oxygens.
2. Mild oxidative stress can occur to melanin cells.
3. The stressed cells generate the inflammation factors like IL-2, TNKa, IL-6, IFNr, and IL-8.
4. The inflammation factors can activate immune system.
5. The new skin cells can be synthesized during recovery cycles with dying old cells.

INGREDIENT PROPERTIES OF NIACINAMIDE

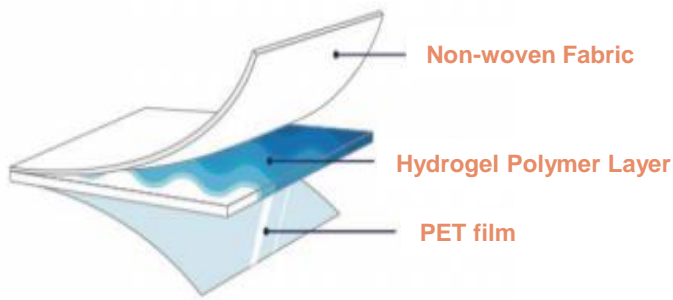
Niacinamide or nicotinamide is a form of niacin or vitamin B3.



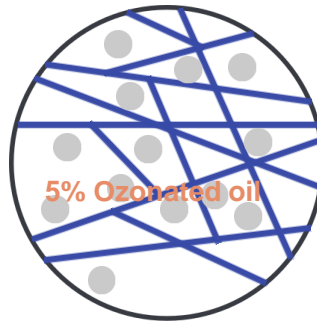
Skin problems: Niacinamide stimulates keratin and collagen synthesis. This plays a pivotal role in reducing wrinkles, dark spots, acne, and pigmentation.

HYDROGEL PATCH

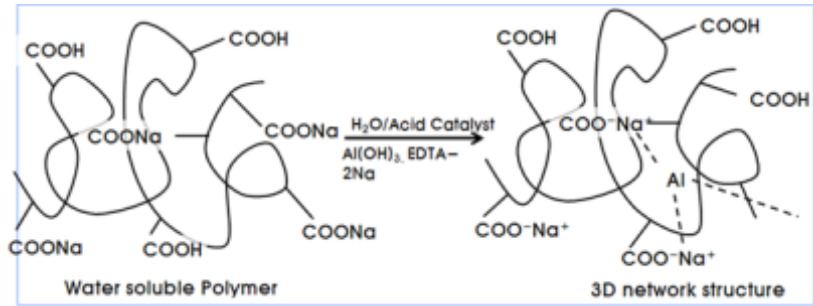
ADVANTAGES OF PATCH-TYPE



↑ Schematic of hydrogel patch



↑ Hydrogel containing 5% of ozonated oil

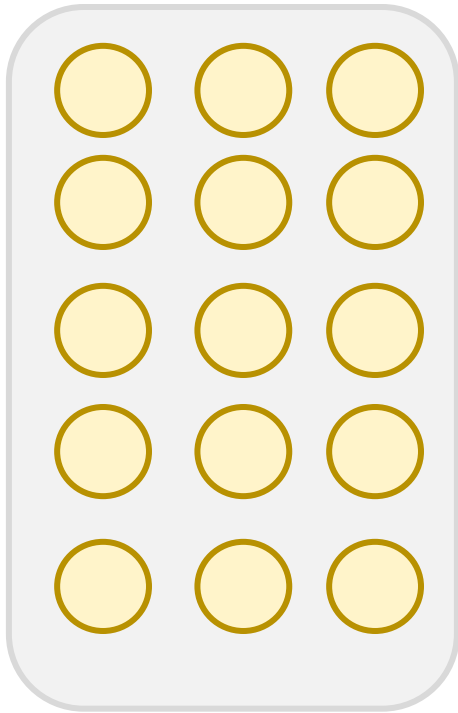


- A gel having water as its main content is called hydrogel.
- The hydrogel can be formed by chemically cross-linked polymers.
- Its hydrating capability could help to avoid skin irritation.
- The outstanding adhesiveness of itself enables attachment without any other adhesive material.

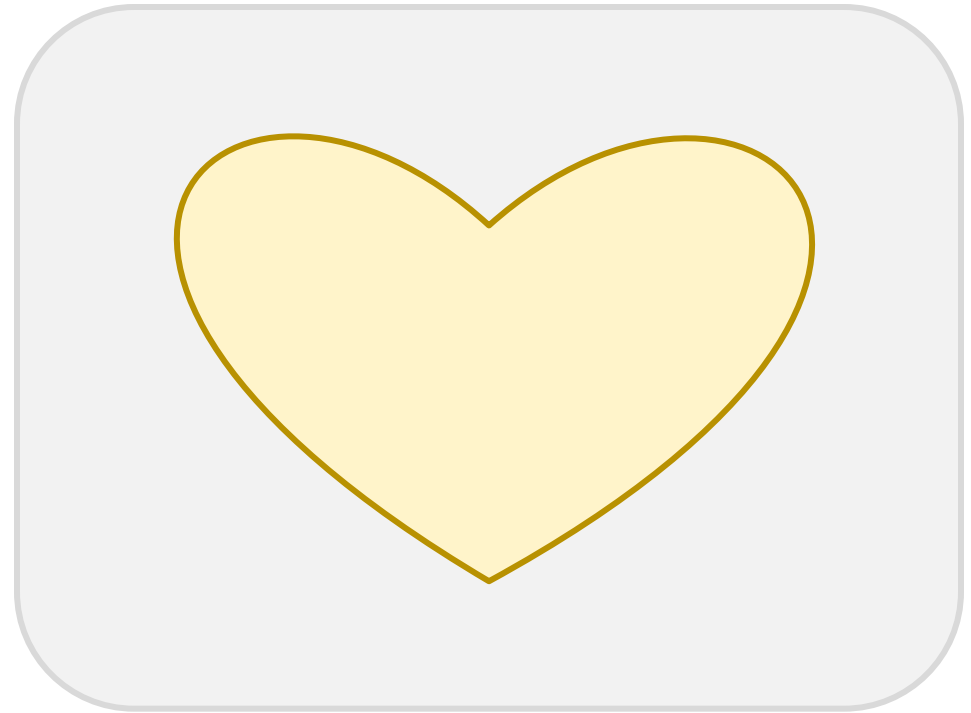
ACTIVE INGREDIENTS

- **Age Spot Patch**
 - **Ozonated Oil (5%)**
 - **Suppression of melanin synthesis**
 - **Niacinamide**
 - **Whitening skin**
 - **Vitamin E**
 - **Antioxidant**
 - **Saururus chinesis extract**
 - **Soothing Moisturizing, Anti-oxidant**

TYPES OF AGE PATCH



Coin type



Pad type

PRODUCTION FACILITY

- **WooShin Labottach, Korea**
 - Dedicated to Produce for Hydrogel Patch
 - ISO-13485 for Medical Devices
 - Korean FDA Medical Device GMP
 - Produced by Class-D Clean Zone
 - Several Inspections by KFDA and other EU companies





THANK YOU!