



# MATERA POWDER

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NATURAL EXFOLIATING INGREDIENT

# MATERA POWDER YOUR NATURAL MECHANICAL EXFOLIANT



Matora powder was developed in collaboration with a Japanese company. It is manufactured from lava stones from Ehime prefecture. This powder is rich in Silica (+60%). Silica is a mineral that occurs naturally present in the body. It helps during collagen production, can improve hair strength, and reduce inflammation. That fine particles are non-nano particle, non-plastic, non-petroleum ingredients that enhance the performance of skincare and cosmetics.

# MATERA POWDER YOUR NATURAL MECHANICAL EXFOLIANT

## ■ PROCESS :



1  $\mu\text{m}$

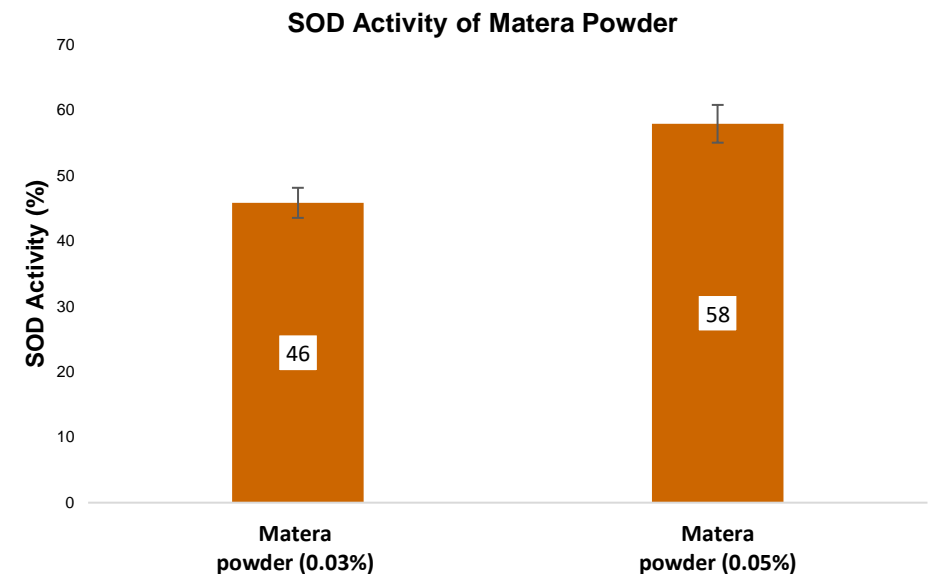
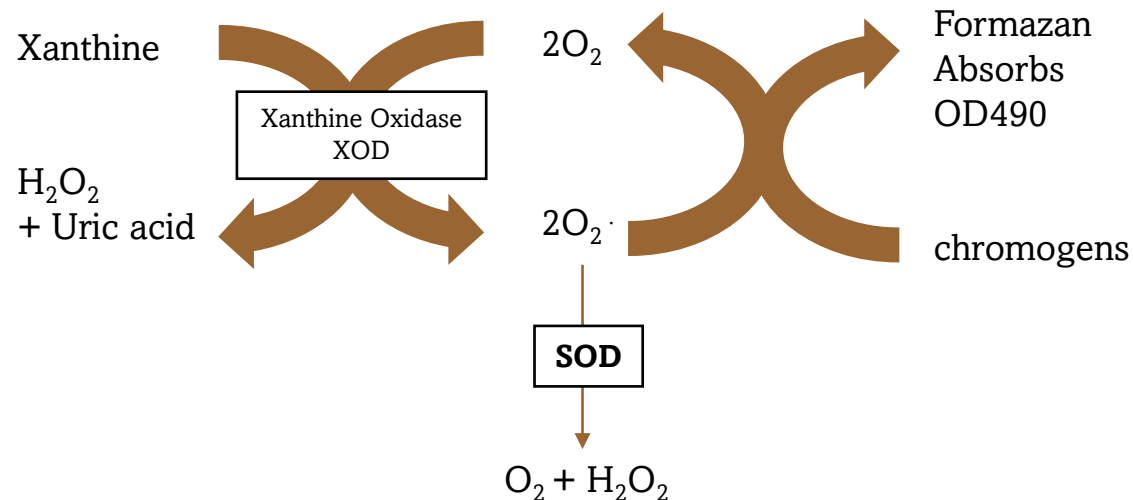
14  $\mu\text{m}$



60  $\mu\text{m}$

# MATERA POWDER - ANTIOXIDANT CAPACITY

- Method:** Superoxide dismutase (SOD) reaction scheme illustrating the coupled reaction between Xanthine Oxidase (XOD), SOD, the generation of superoxide radicals, and the reduction of the dye WST-1 by superoxide anion to a colored WST-1 formazan product that absorbs light at 450 nm. SOD scavenges superoxide anion and thereby reduces the rate of formation of WST-1 formazan product.

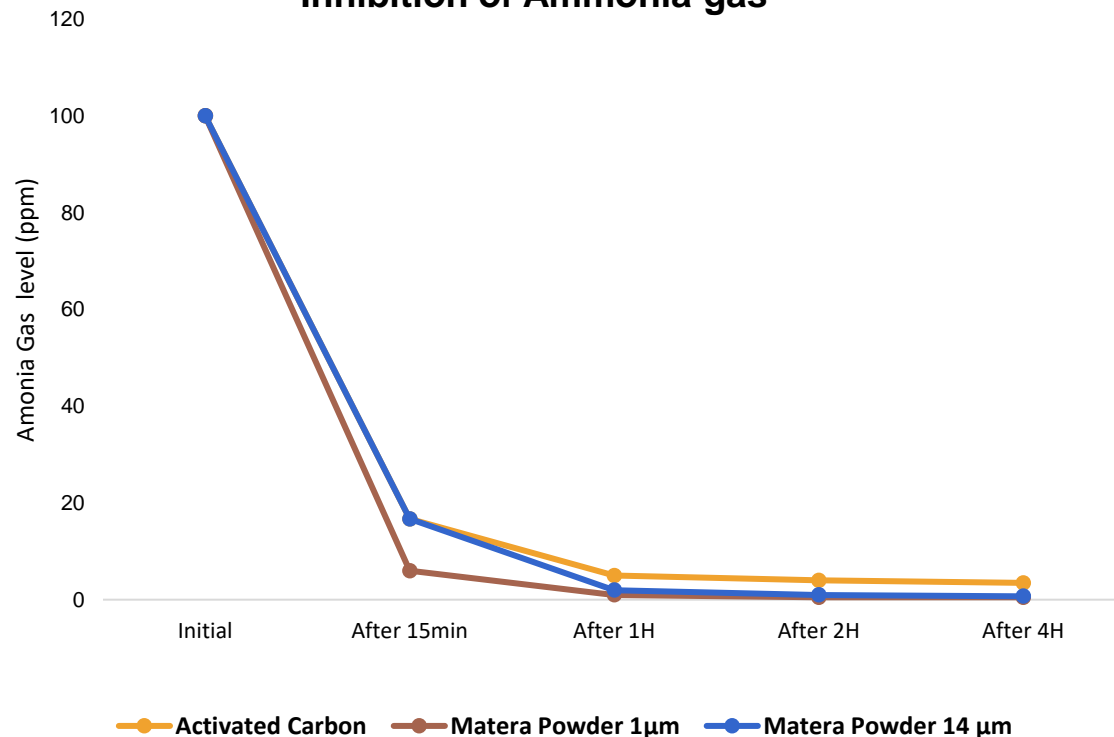


- Matera powder (0.05%)** increases SOD activity by 58%. Matera powder has **antioxidant capacity**.

# MATERA POWDER DEODORIZATION TEST

**Method:** The Inhibition of ammonia gas levels was realized in the Tedlar® bags, and the concentration of ammonia was measured after applying Matera powder or Activated carbon (control) after 15 minutes, 1 hour, 2 hours, and 4 hours.

Inhibition of Ammonia gas



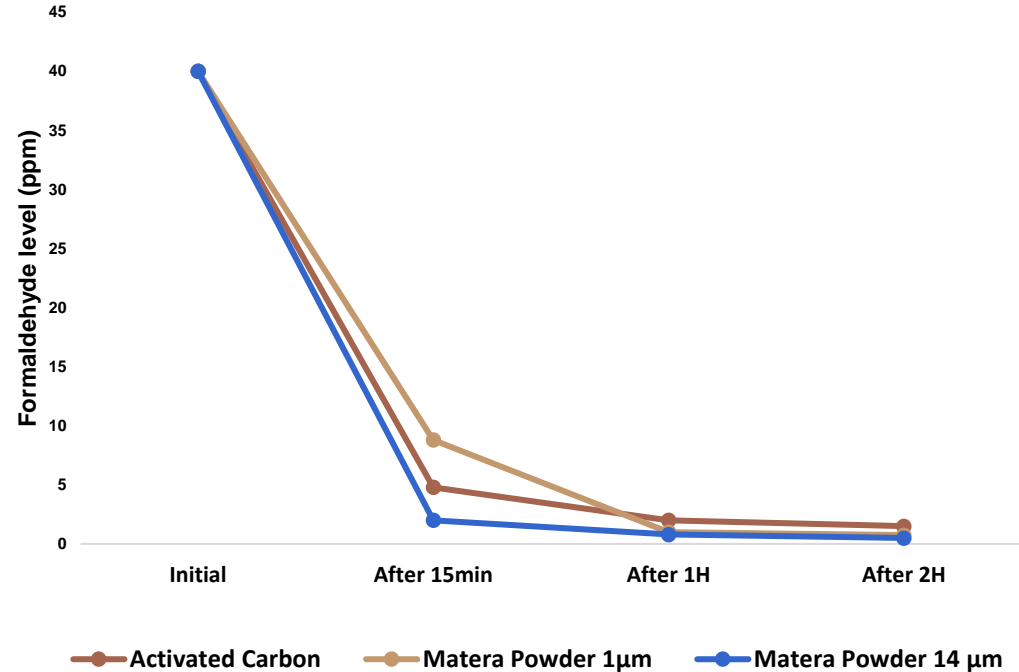
- After 4H applying **Matera powder 1 µm**, the level of ammonia measured is 0.5 ppm.
- After 4H applying **Matera powder 14 µm**, the level of ammonia measured is 0.75 ppm.
- **Matera powder (0.025%)** can decrease the level of ammonia gas produced in the odor process.

\*The 60µm size has similar results to activated carbon (3.5 ppm).

# MATERA POWDER DEODORIZATION TEST

- **Method:** The reduction of the formaldehyde test was realized in the Tedlar® bags, and the concentration of formaldehyde was measured after applying Matera powder or Activated carbon (control) after 15 minutes, 1 hour, and 2 hours.

Inhibition of Formaldehyde



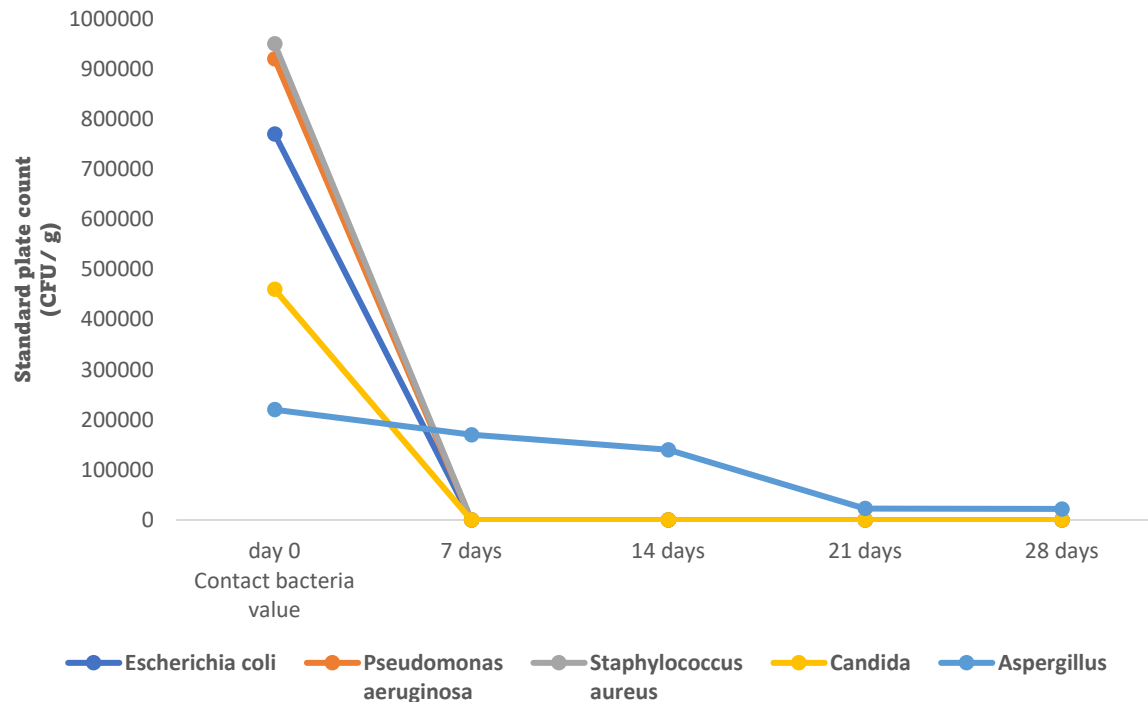
- After 4H applying **Matera powder 1 µm**, the level of formaldehyde measured is 0.5 ppm. For **14 µm**, the level of formaldehyde measured is 0.6 ppm.
- Matera powder (0.025%) can decrease the level of formaldehyde produced in the odor process.
- Matera powder can decrease the level of ammonium gas and formaldehyde produced in the odor process.

**That ingredient is suitable for deodorant products.**

# MATERA POWDER PRESERVATIVE TEST

**Method: Antibacterial activity of Matera powder 14  $\mu\text{m}$  is measured.** Effect inhibition of the microbial growth in the recovery medium during the 28 days of the testing period. The number of bacteria and fungi is measured, *Escherichia coli*, *Pseudomonas aeruginosa*, *Staphylococcus aureus*, *Candida albicans*, and *Aspergillus brasiliensis*. Each of them is stored at 22.5 ° C, and the count is measured on days 7, 14, 21, and 28.

Preservative Test



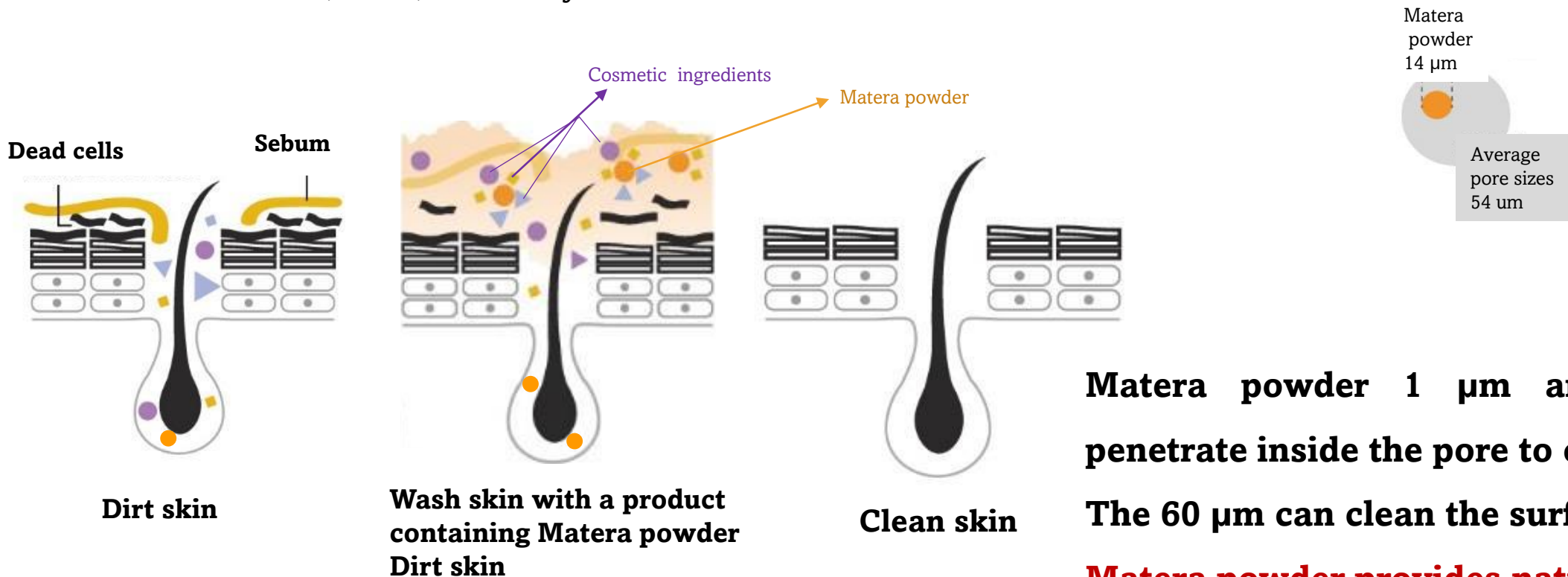
Matera powder 14  $\mu\text{m}$  **can effectively inhibit** *Escherichia coli*, *Pseudomonas aeruginosa*, *Staphylococcus aureus*, and *Candida albicans*.

**MATERA POWDER has antibacterial activity.**

# MATERA POWDER EXFOLIANT PROPERTY

Dead skin cells old keratin, sebum, or makeup leftover can create blackheads and pimples or skin disorders. With its small size, Matora powder can effectively clean and remove dead cells, and old keratin, and absorbs excess sebum.

It is suitable for Hair, Face, and Body.



**Matora powder 1 μm and 14 μm can penetrate inside the pore to clean it.**

**The 60 μm can clean the surface of the skin.**

**Matora powder provides natural exfoliation.**



# MATERA POWDER - UV PROTECTIVE EFFECT

INCI Name	W/O formulation type	
	Formulation A (%)	Formulation B (%)
Diisostearyl Malate	2.2	
Polyglyceryl-2 Oleate (And) Polyhydroxystearic Acid (And) Polyglyceryl-2 Stearate	0.5	
<b>Rhyolite Powder</b>	-	5
Titanium Dioxide	40	
Aluminum Hydroxide		
Hydrated Silica		
Hydrogen Dimethicone		
Ethylhexyl Palmitate		
Zinc Oxide	10	
Ethylhexyl Palmitate		
Hydrated Silica		
Hydrogen Dimethicone		
Polyhydroxy stearic acid	5	
Caprylyl Methicone		
Cyclopentasiloxane	9.7	7.3
Cyclopentasiloxane (And) PEG/PPG-19/19 Dimethicone	5	
Lauryl Peg-10 Tris (Trimethylsiloxy)silylethyl Dimethicone	2.5	
Purified Water	17.7	
Kappaphycus Alvarezii Extract	1	
Buthylene Glycol		
Water		
Phenoxyethanol	0.3	

- An emulsion formulation for sun care products. One Sunscreen was formulated with Matera powder, and another was formulated without Matera powder.
- After the Sun protection factor (SPF) and UV-A protection factor (UVAPF) were measured.

	Formulation A	Formulation B
<b>SPF (ISO 24444)</b>	45.3	<b>72.1</b>
<b>UVAPF (ISO 24442)</b>	12.55	<b>15.5</b>

- **Matera Powder boots UV protection.**

# MATERA POWDER – TECHNICAL DATA

- **INCI Name:** Rhyolite powder
- **Recommended dosage :** 0.01 - 5 %
- **Color:** Beige or Sand
- **Specific Gravity:** 2.67
- **Appearance ( 25°C ) :** Powder (1 µm, 14 µm, and 60 µm particles sizes)
- **Expiry date:** 5 years
- **Application:** Hair, Skin, Body, and Make-up Products
- **Packaging:** 5 Kg in an Aluminum foil bag.
- **Storage:** Temperature storage from 4° C to 30° C in a dry place and avoid well-ventilated areas.

# MATERA POWDER

- **Formulation:** Add at the end of the formulation
- **Application :** Hair, Skin, Body and Make-up Products
  - Skincare: cleanser 1%
  - Bodycare: body lotion 0.5%, soap 2%
  - Haircare : gel scrub 0.1~ 0.5 %



- **Range :** Antioxidant / Sun care / Anti-aging / / Sensitive skin



**Shampoo formulation with 0.1 %  
Matera powder 60  $\mu$ m**

# MATERA POWDER IN FORMULATION



- **Toothpaste:** The primary benefit of Matera powder in toothpaste is its abrasiveness. Combine with whitening ingredients in toothpaste will help to scrub the stains from the surface of your teeth.
- **Foundation:** Matera powder will help makeup products to have a better grip and spread onto the skin such as a bulking agent. **It prevents shine and helps your foundation adhere and stay on the skin**
- **Formulation:** Helps to improve the texture and feel of a formulation.

COSMETIC PRODUCTS	Matera Powder 1 $\mu$ m	Matera powder 14 $\mu$ m	Matera powder 60 $\mu$ m
PEELING		✓	0.5 ~ 3%
GEL SCRUB		✓	0.5 ~ 2 %
SHAMPOO	0.01 ~ 0.05% If 0.1% of the formulation becomes orange		
BODY PRODUCTS	✓	✓	✓
Make-up products	✓	5 % Foundation powder	
Deodorant product	0.01 ~ 0. 5%	0.01 ~ 0. 5%	
TOOTHPASTE	✓	✓	✓
SUNCARE	1~ 5 %	1~ 2 %	

# MATERA POWDER - CLAIMS





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**YOUR NATURAL EXFOLIATING INGREDIENT**



**Address:** R3-407, No. 31, Gongye 2nd Road, Annan District, Tainan City 70955, Taiwan  
**Phone office:** +886-6-384-3570  
**Website:** [www.ti-unic.com](http://www.ti-unic.com)

**Email /** [mayshih@ti-unic.com](mailto:mayshih@ti-unic.com)  
[d.destouches@ti-unic.com](mailto:d.destouches@ti-unic.com)