



S-100

Electrolized Deoxidized and Ionized Water S-100

Patented

S-100 is a high function reducing ionized water electrolyzed using a special patented process.

TRADE NAME : ELECTROLIZED DEOXIDIZED AND IONIZED WATER S-100
INCI NAME : WATER

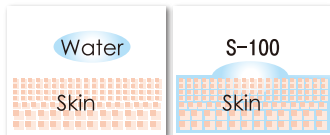
S-100 features

S-100 achieves a surface tension of 56mN/m(25°C)

*The water's surface tension is 72 mN/m(25°C)

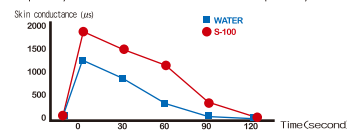
Moisture effect

As the surface tension is only 56mN/m(25°C), it is readily match to the skin and moisturizes the skin.

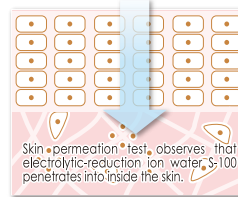


Skin moisturizing effect

Dropped the respective test solutions on the skin, and wiped the test solutions immediately after that. With the time as 0, measured the skin conductance overtime, and evaluated Skin absorption capacity and Skin moisture retention capability.



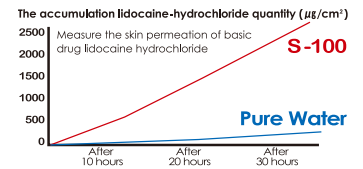
Dermal penetration effect



Skin permeation test, observes that electrolytic-reduction ion water S-100 penetrates into inside the skin.

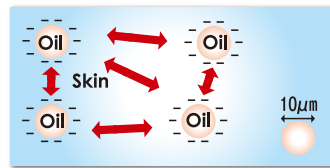
Delivery effect

It can be used as a delivery system for transporting the effective ingredients to inside the skin.



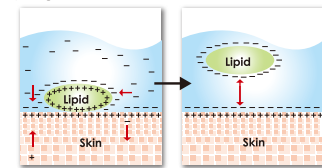
Emulsification

Disperse the oil by reducing the particle diameter of the oil to 10µm or less.



Sebum cleaning

The work force in ionic interactions between molecules achieves stripping effect.



Preservative-free

S-100 is alkaline indicating pH11.0 or higher.

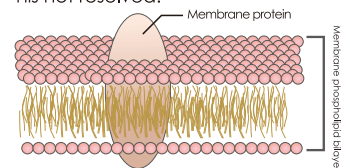
Even alkalophilic bacteria that are comfortable with alkaline can survive only at pH10.5 or lower, and bacterial growth is impossible under the alkaline S-100.

*As it becomes acidulous upon instant touch on the skin, it will not stimulate the skin.

- Achieve preservative-free.
- Cosmetics that can be used at ease even in the itchy skin are feasible.

Safety

Even if it infiltrates the skin, S-100 is safe because the membrane protein is not resolved.



S-100 antimicrobial activity

Test bacteria	Test solution	After startup	After 1 minute	After 2 hours	After 3 hours	After 4 hours	After 6 hours
Bacillus E.coli	S-100	6.1X10 ⁵	<10	*****	<10	*****	<10
	Sterile purified water	6.1X10 ⁵	*****	*****	6.3X10 ⁵	*****	4.4X10 ⁵
Salmonella	S-100	2.2X10 ⁵	<10	*****	<10	*****	<10
	Sterile purified water	2.2X10 ⁵	*****	*****	4.5X10 ⁵	*****	3.7X10 ⁵
Pseudomonas aeruginosa	S-100	3.7X10 ⁵	<10	*****	<10	*****	<10
	Sterile purified water	3.7X10 ⁵	*****	*****	6.2X10 ⁵	*****	4.9X10 ⁵
Parahaemolyticus vibrio	S-100	2.8X10 ⁵	<10	*****	<10	*****	<10
	Sterile purified water	2.8X10 ⁵	*****	*****	1.7X10 ⁵	*****	1.6X10 ⁵
Legionella	S-100	7.5X10 ⁵	<100	*****	<10	*****	<100
	Sterile purified water	7.5X10 ⁵	*****	*****	1.2X10 ⁵	*****	9.6X10 ⁵
Herpes simplex virus type 2	S-100	1.5X10 ⁵	<100	<10	*****	<10	<10
	Sterile purified water	1.5X10 ⁵	1.5X10 ⁵	1.5X10 ⁵	*****	1.6X10 ⁵	1.4X10 ⁵
Chlamydia trachoma	S-100	1.5X10 ⁵	<10	<10	*****	<10	<10
	Sterile purified water	7.7X10 ⁵	7.5X10 ⁵	7.5X10 ⁵	*****	7.6X10 ⁵	7.4X10 ⁵
P.acnes	S-100	3.8X10 ⁵	<10	<10	*****	<10	<10
	Sterile purified water	3.8X10 ⁵	3.5X10 ⁵	3.4X10 ⁵	*****	3.6X10 ⁵	2.8X10 ⁵

(<10, <100: Not detected, ****: Not measured)