New moisture agent「p-MEB」

Osaka Organic Chemical IND.Ltd

大阪有機化学工業株式会社
OSAKA ORGANIC CHEMICAL INDUSTRY LTD.

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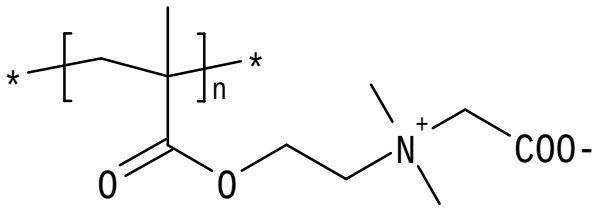


Poly methacryloyl ethyl carboxymethylbetain

【Specification】

Appearance	Clear～Pale yellow
Check study	Absorption of IR
pH	5.5～7.5
Heavy metal	<10ppm
Arsenic	<2ppm
Residue on ignition	<0.5%

New moisture agent「p-MEB」

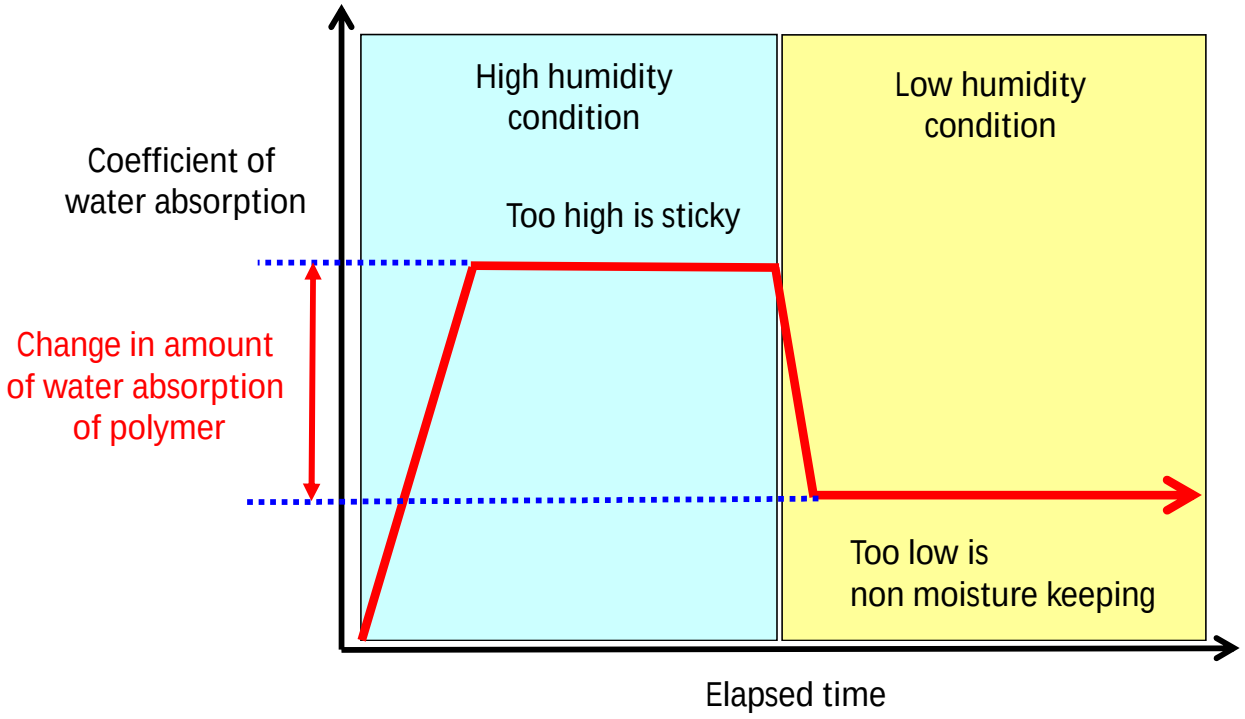
＜Characterstic＞

p-MEB is moisture as the hyaluronic acid, and is cheaper than the hyaluronic acid.
p-MEB doesn't cause the allergy.
In dissolubility and the viscosity, The salt doesn't influence p-MEB.
In pH=4-10, neither the viscosity nor dissolubility change into p-MEB.
If the wound is covered with p-MEB, the wound healing is promoted.

＜ Usage example ＞

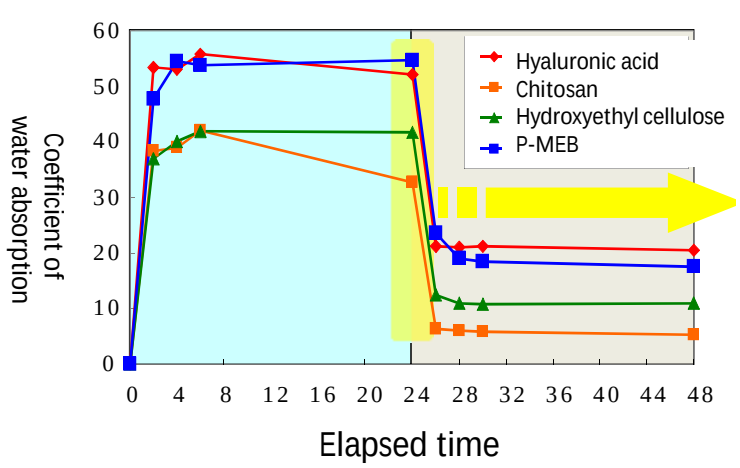
p-MEB is useful as the diluent of the hyaluronic acid.
p-MEB is useful for a moisture and a steady bubble of the shampoo and the rinse.
p-MEB is useful for the moisture of the dye hair medicine.
p-MEB adds the moisture retention and the wound healing to the face packing.

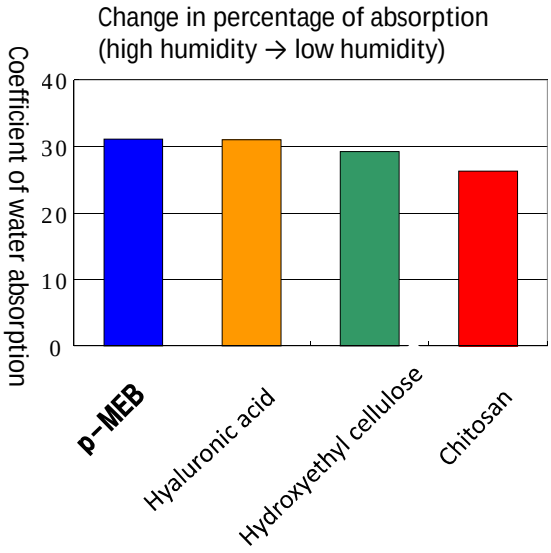
Measuring method of Moisture keeping



Moisture keeping of pMEB

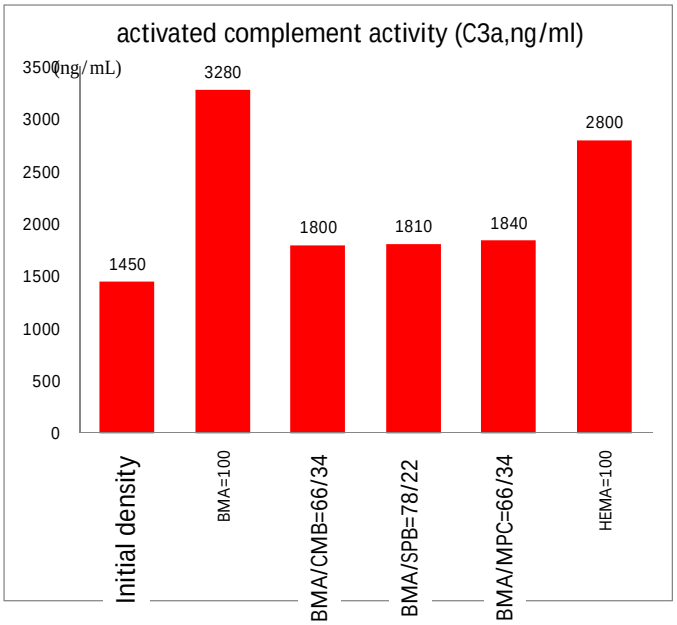
"p-MEB" has an excellent moisture keeping similar to the hyaluronic acid.
When drying in winter, an excellent moisturizing action is observed.

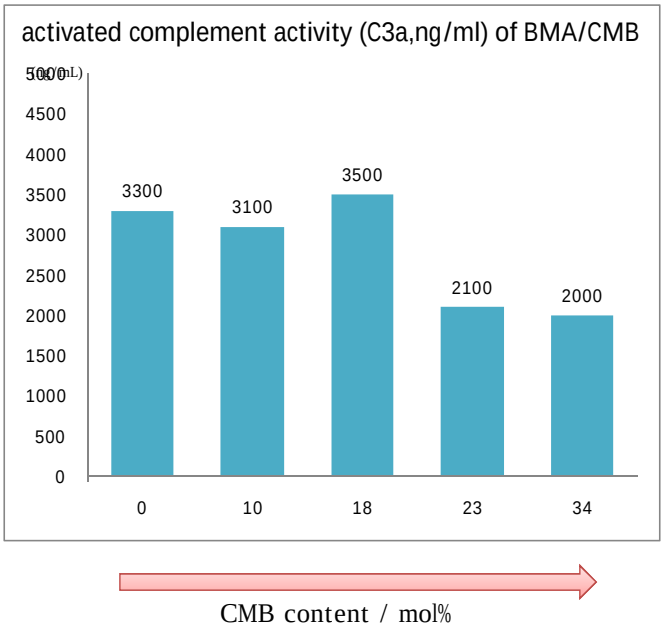




Complement activity （STOUT）

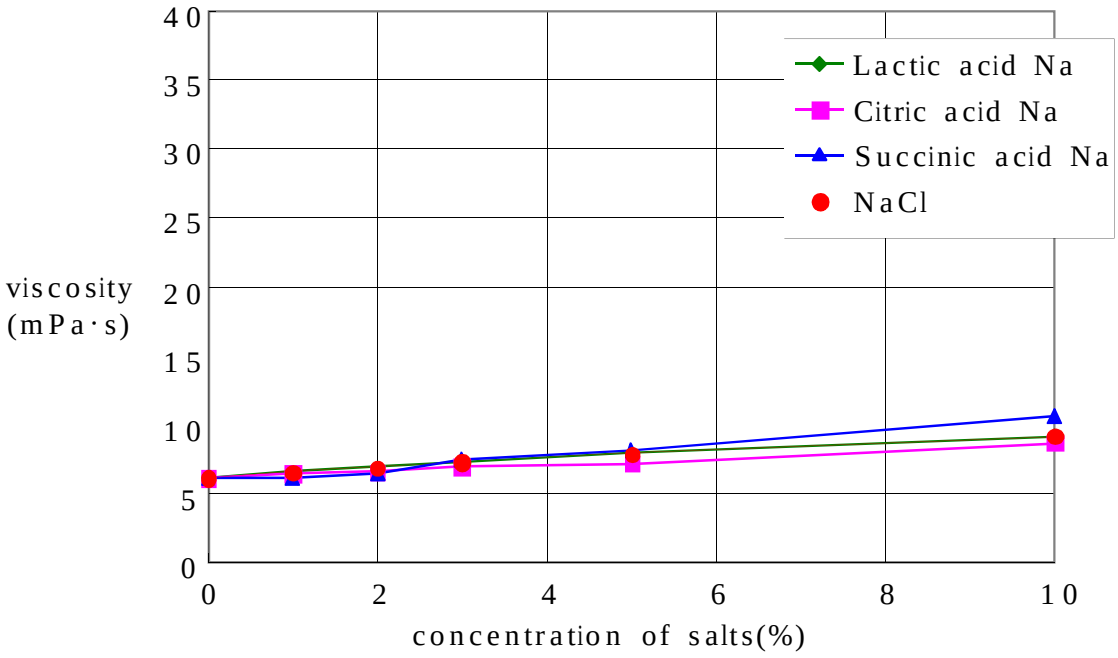
Human blood was touched to each material,
and activated complement activity (C3a) was measured.
As for the surface of STOUT(BMA/CMB),
it was confirmed that the adhesion of the cell decreased greatly.





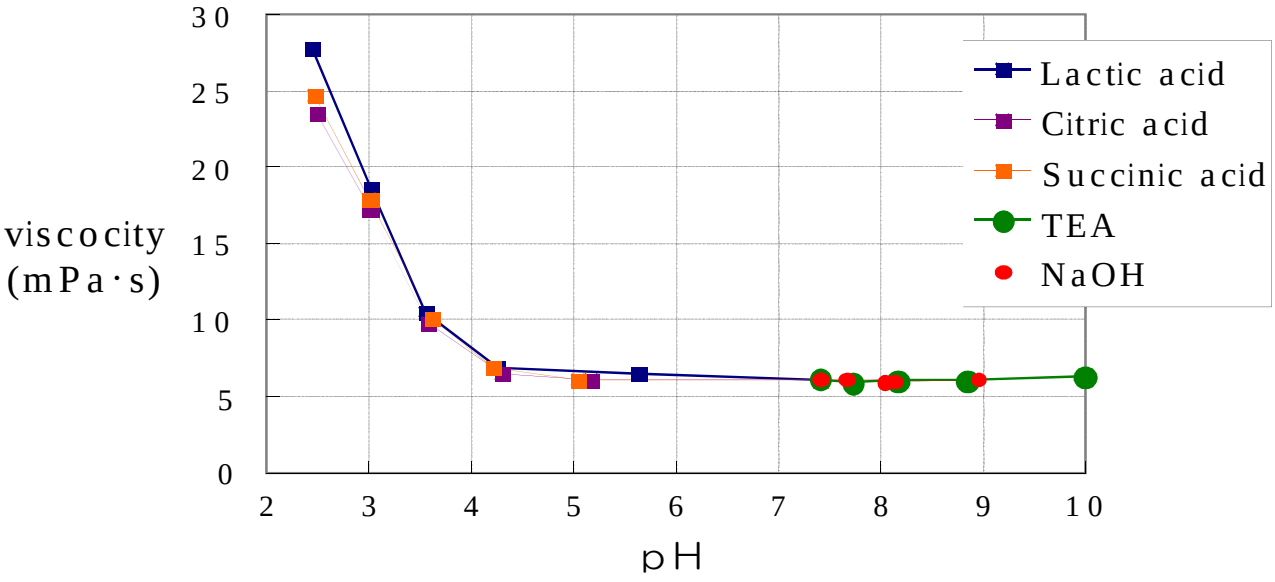
Viscosity to various salt

When various salts is added, The viscosity of 1% solution of p-MEB was measured.
The salt doesn't influence p-MEB.

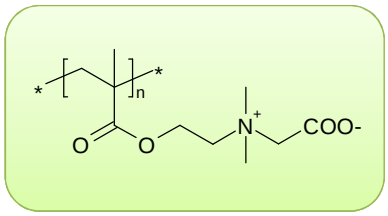


Influence of pH

In 1% of p-MEB, The acid or the alkaline component was added,
and the viscosity in each pH was measured.
Within the range of pH=2-10, p-MEB solves to water.
The viscosity doesn't change in pH=4-10, and it is pH=4 or less and the viscosity rises.



Wound healing material



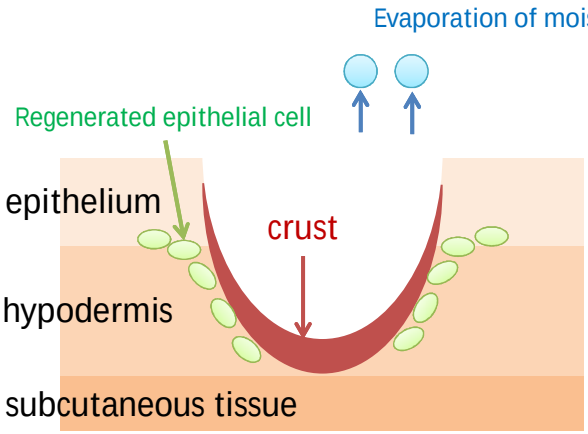
p-MEB(PCMB)

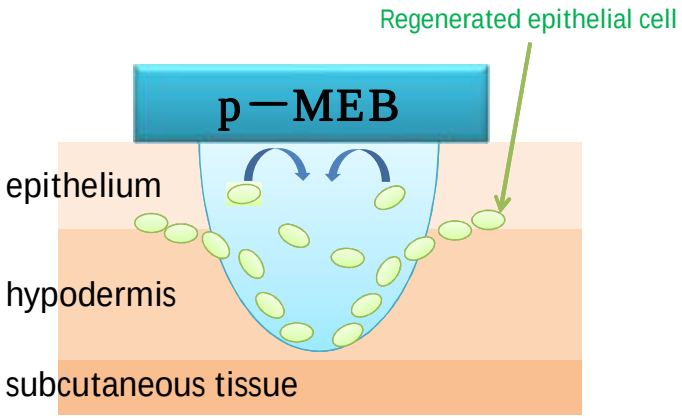
Making to drug product

Pad with wound healing

特性	傷口パッドとしての効果
Wound healing is accelerated.	wound healing and non-scar.
Moisture keeping as Hyaluronic acid.	Moisture retention of wound.
The protein is not adsorbed.	The reproduction cell works efficiently.
Complement activity(C3a) is low.	The allergy doesn't occur.

Mechanism of wound healing





The moisture is evaporated and formed crust prevents regenerative cell for percolating.
Because diffusion velocity of regenerative cell is slow, the wound healing is slow.
The scar remains easily, because the regenerating is vary.

Because p-MEB prevent the moisture for evaporating and the adhesive of regenerative cell is little, the efficiency of regenerative cell is high.
The wound healing is fast, because the diffusion velocity of regenerative cell is fast.
The scar doesn’t remain, because regenerative cell.

Moisture Lotion

Moisture Lotion

	Component	Effect	w/w%
1	Water	diluent, Moisture	78.42
2	Propanediol	Moisture	6.00
3	Glycerin	Moisture	5.00
4	Poly methacryloyl ethyl carboxymethylbetain	Moisture	5.00
5	Pyrus Cydonia Seed Extract, Glycerin, Water	Moisture	2.00
6	Sphingomonas Ferment Extract, Glycerin, Tocopherol	Moisture, antioxidation, blood circulation promotion	1.00
7	plant extract	Moisture	1.00
8	1,2-Hexanediol	Moisture, antibacterial	0.50
9	Citric Acid	pH control	0.50
10	Sodium Hydroxide	pH control	0.32
11	Tocopheryl Acetate	anti-inflammatory, antioxidation, blood circulation promotion	0.16
12	Dipotassium Glycyrrhizate	pH control	0.10

INQUIRY

OSAKA ORGANIC CHEMICAL INDUSTRY LTD.
Specialty Chemical Sales Department
Yoshiyuki Saruwatari

NEW TOYAMA BLDG. 1-7-20,AZUCHIMACHI,
CHUO-KU,OSAKA 541-0052 JAPAN
TEL : +81-6-6264-5076 FAX : +81-6-6264-7466
E-mail : Yoshiyuki_Saruwatari@ooc.co.jp