

***** Hei-Mex 6805 *****

1. Overview

Hei-Mex 6805 is a coating agent using water-based polyurethane resin with high flexibility. Antimicrobial and mold proof effects are obtained by highly safe organic composites.

2. Basic characteristics

Item		Values	Notes
Material color	-	Milky white liquid	Water-based polyurethane resin
Coating film	-	Translucent	Polyurethane resin
Viscosity	-	<60 sec	JIS K 5600-2 Anest Iwata viscometer NK-2
Non-volatile content	%	45	In-house method
Solvent content	%	2	In-house method

3. Basic physical properties

Item		Values	Notes
Texture	-	Rubber Touch	In-house method
Chemical resistance (Dropping method)	1 min.	Acetone/Toluene/ Butyl acetate/Ethanol 3/3/3/2	Solvent resistance test JIS K 5600-6-1 Evaluation Criteria 0:No change 1:With traces 2:With traces (Rubbing and peeling with your nails)
Chemical resistance (Rubbing test)	Over 20 times	Ethanol 0	3:Swelling 4:Dissolution ※Dry conditions of the material are 80°C × 20 mins + 25°C × 2 days

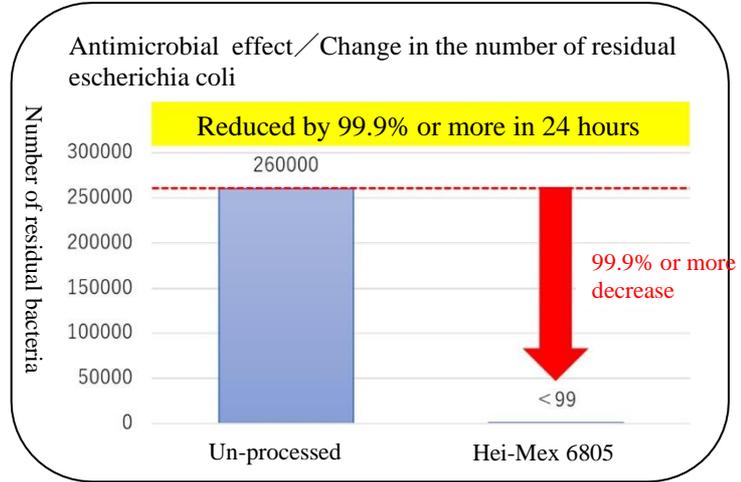
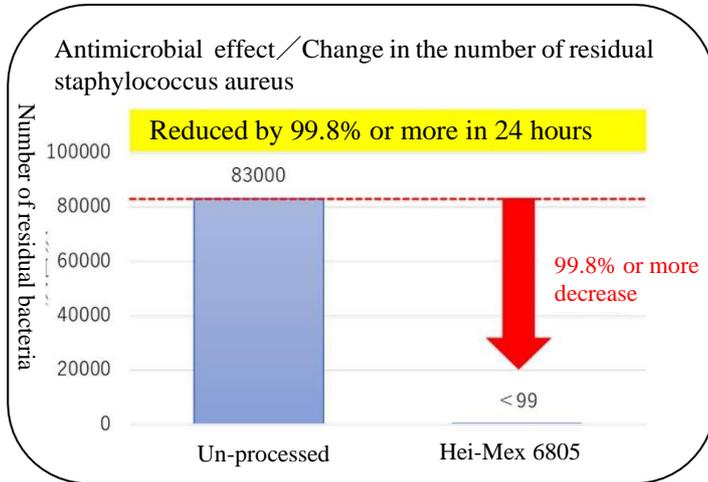
This physical property value is representative of our measurements and is not a specification value.

Since the physical properties of the product vary depending on the shape and molding conditions, thoroughly confirm that the product is used.

4. Antimicrobial and mold proof properties

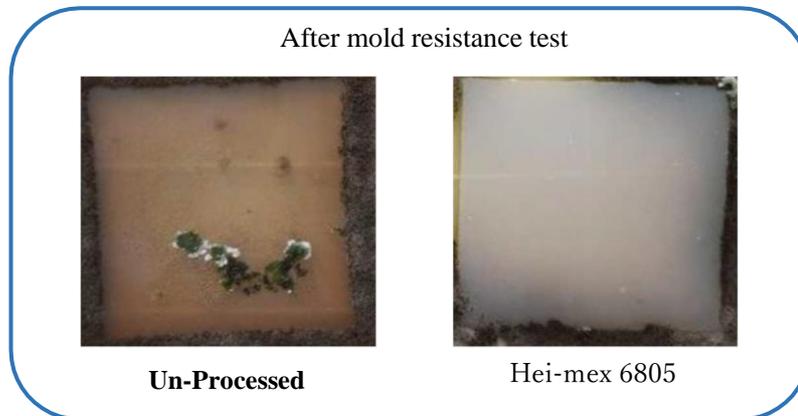
1)Antimicrobial test (JIS Z2801:2000)

Test organism: Staphylococcus aureus
Escherichia coli



2)Mold resistance test

Test organism: 71 fungi (test using about 60 fungal species with high detection frequency in residential environment)
Test duration: 28 days



	Culture period (days)			
	7	14	21	28
Un-Processed	4	4	4	4
Hei-Mex 6805	0	0	0	1

Evaluation	Bacterial growth	Correlation between this test and actual life
0	No bacteria grows	7 days : Equivalent to 3 months
1	Growth of 10% or less	14 days : Equivalent to 1 years
2	Growth of 10-30% or less	21 days : Equivalent to 2 years
3	Growth of 30-60% or less	
4	60% or more full growth	28 days : Equivalent to 3~5 years

5. Necessary tools

- Painting tools such as spray guns and brushes for water-based paints

6. How to use

Apply the paint using spray guns or brushes to the surface of the object.

Finish by drying at arbitrary temperature/time after painting. ※Shake well before use.

7. Dry condition

After painting, leave the object as it is for a while in ventilated place and let it dry at arbitrary temperature/time. Tack-free time must be adjusted depending on the thickness of the coating film, the ambient temperature, and the ambient humidity. As a standard of the drying time, refer to the following conditions.

Conditions Film thickness	Drying time (min)			
	25°C	40°C	60°C	100°C
20 μ m or less	40	25	10	1
30 μ m~	120	65	20	1
100 μ m~	1 day or more	1 day or more	Inappropriate	Inappropriate
1 mm or more	1 week or more	Inappropriate	Inappropriate	Inappropriate

※It takes about 25°C × 5 days or 80°C to 120°C × 30 minutes for the coating to fully cure.

8. Precautions for handling

This product is water based. When freezing, the water contained is separated and the viscosity changes, and flocculates are generated. Please keep the material at 5 to 35°C, paying attention to freezing.

When the material used once is stored again, there are some cases in which the viscosity will become high.

To adjust the viscosity, add an appropriate amount of ion-exchanged water and mix well.

9. Precautions for application

- (1) Start applying the material from a detailed point at first. Avoid painting in only one attempt in order to form thick film.
- (2) If the film with a thickness of several hundred micrometers or more is required, let it dry at 40°C or below over one day.
- (3) Prevent dust from adhering to the film while drying the film.

10. Safety and health precautions

(1) Provide a local exhaust ventilation system in the work area and be careful of ventilation.

(2) Be careful not to touch the raw material directly with your hands or skin.

In case of contact with the material, wash it off immediately with soapy water.

(3) Leaving it in contact for a long time may cause rash.

(4) If the material comes into contact with the eyes, immediately wash the eyes with running water for about 15 minutes and consult an ophthalmologist.

11. Fire Defense Law Hazardous Materials Classification

Non-hazardous materials