

## MAINTENANCE & CLEANING INSTRUCTIONS

### EVERYDAY MAINTENANCE AND REMOVAL OF COMMON STAINS

As with any other material for interior design, a CleanTouch surface should be cleaned regularly. It does not require any special maintenance, just a damp cloth with warm water or a mild detergent. Almost all regular household cleaning products or disinfectants can be safely used. For the most common stains, you can simply clean the surface with warm water using a non-abrasive cloth. Tougher stains can be removed with non-abrasive household cleaners or solvents.

For older, dried or caked-on stains, use a magic sponge or soft cloth to remove them. After using any solvents, we recommend rinsing the surface with warm water and a detergent. Always rinse thoroughly to remove the detergent with clean water, preferably warm.

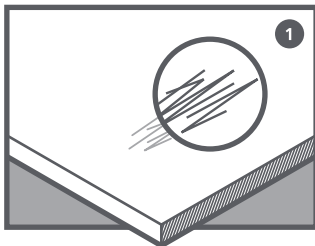
### STUBBORN STAINS AND MINOR SCRATCHES

CleanTouch surfaces have a unique non-porous external layer, allowing you to keep it neat with simple, everyday care and cleaning methods. In case of stubborn stains, we recommend the use of a specific cleaning agent (as per the table reported on next page) to remove any trace of the stain.

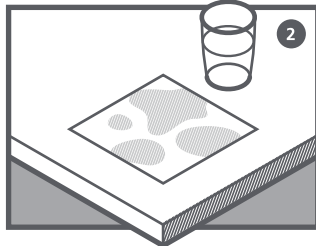
In case of micro-scratches, please refer to the MAINTENANCE INSTRUCTIONS for the surfaces as illustrated below.

### MAINTENANCE INSTRUCTIONS

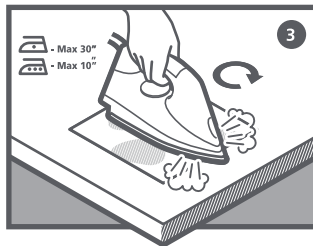
#### IRON



1. Superficial defects caused by micro-scratches.



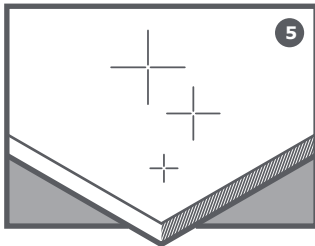
2. Place a dampened sheet of kitchen roll over the area where the micro-scratches can be seen.



3. Place the hot iron on the surface that needs repairing. Do not leave the iron on the surface for more than 10 seconds at a time.



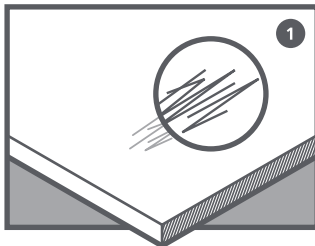
4. Rinse the repaired area with lukewarm water and a microfibre cloth.



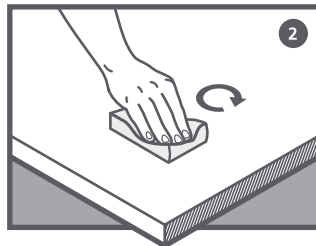
5. The surface should now be healed.

### MAINTENANCE INSTRUCTIONS

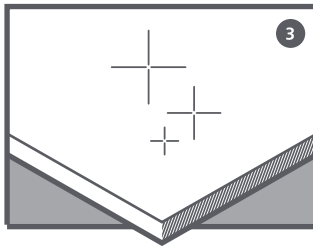
#### MAGIC SPONGE



1. Superficial defects caused by micro-scratches.



2. Rub the magic sponge on the area where the micro-scratches can be seen. The sponge can be used dry or slightly damp.



3. The surface should now be healed.

### USEFUL CLEANING ADVICE

For the best results when cleaning CleanTouch, it is important to remember the following advice:

- although very resistant, a CleanTouch surface must still never be treated with products containing abrasive substances, macroabrasive sponges or unsuitable materials such as sandpaper or steel wool;
- strongly acidic or alkaline products should be avoided because they can stain the surface;
- bleach and heavily-chlorinated products should be avoided because they can degrade the surface. Sodium hypochlorite should be used at concentrations lower than 5%, and for no more than 5 minutes at a time, then rinsed off with a sponge or towel;
- hydrogen peroxide at concentrations lower than 3% should be carefully rinsed off. For concentrations higher than 3%, we recommend avoiding leaving this solution in contact with the surface for more than 10 minutes at a time, and the surface must be thoroughly rinsed with a non-abrasive sponge and then dried well;
- when using solvents, the cloth used must be perfectly clean so as not to leave marks on the CleanTouch surface. Any marks may, however, be removed by rinsing with hot water and drying well;
- do not use furniture polishes or wax-based cleaners in general, because they tend to form a sticky layer on the CleanTouch surface that attracts and traps dirt;
- do not use metal scrapers, iron brushes or any other metal tool to remove stains, paint, plaster or other substances from the surface.

**NOTE:** CLEANING INSTRUCTIONS AVAILABLE ON NEXT PAGE

# MSDS for High Pressure Laminate



## 1. product information and company indification

**Product name :**

Melatone Ltd. High Pressure Laminates (All Grade Thicknesses)

**Information of manufacturer :** 692-10, Gojan-dong, Namdong-ku, Incheon, Korea

**Emergency Contact :** Tel > 82-32-811-8620~4

Fax> 82-32-811-8625

**Chemical Name :**

Laminated plastic.

## 2. Composition , Information on Ingredients

<u>Chemical name</u>	<u>Percentage</u>	<u>CAS No</u>
Paper	10 – 60 %	None
Phenol Formaldehyde Resin	10 – 60 %	9003– 35–4
Paper – Pigmented	< 10 %	None
Melamine Formaldehyde Resin	10 – 60 %	9003– 08–1

## 3. Hazards identification

**Physical state and appearance :**

-Solid sheet.

**Emergency overview:**

-Dust generated during machining of product may cause mechanical of eyes, skin, and respiratory system.

**Potential Acute Health Effect :**

-Eyes : Dust may cause mechanical irritation to eye.

-Skin : Dust may cause mechanical irritation. Any sharp edges will cut of abrade skin.

-Inhalation : Inhalation of dust will produce irritation to respiratory tract, characterized by sneezing and coughing.

-Ingestion : Not an expected route of entry.

**Potential Chronic Health Effects :**

-Repeated exposure of the eyes to a low level of dust com produce eye irritation.

-Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

## 4. First aid measures :

**General information:**

In case of allergic, especially in the breathing area, seek medical advice immediately.

**In case of inhalation :**

No special measures are necessary.

**In case of skin contact :**

Wash with water and soap.



**In case of eye contact :**

Rinse immediately carefully and thoroughly with eye-bath or water.

**In case of ingestion :**

Rinse mouth thoroughly with water.

**5. Fire-fighting measures**

**Flash point :** Not available

**Flammable Limits :** Not considered to be flammable.

**Lower explosion limits :** Not available

**Upper explosion limits :** Not available

**Products of combustion :** carbon Oxides ( CO and CO<sub>2</sub>), Ammonia

**Extinguishing media :** In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam.

**Fire Hazards :** Combustible in presence of open flame.

**Fire Fighting Media and Instructions Protective Clothing (Fire) :**

-Small Fire : Use Dry chemicals, CO<sub>2</sub>, water spray or foam.

-Large Fire : Use water spray, fog, or foam. Do not use water jet.

Fire fighters should wear positive pressure self-contained breathing apparatus and full turnout gear.

**6. Accidental release Measures.**

- **Spill and leak :** Use proper tools to the spilled solid in a convenient waste disposal container.

**7. Handling and Storage**

-**Handling :** After handling, always wash hands thoroughly with soap and water. If user operations generate dust use ventilation to keep exposure to airborne contaminants below the exposure limit.

-**Storage :** No specific storage is required.

**8. Special protection Information**

**-Protective Practices During Maintenance of Contaminated Equipment :**

Do not use compressed air to remove dust from equipment. Sweep or wash dust from unit.

**-Eye Protection :**

Wear ANSI-approved safety glasses or goggles in fabrication operations that may generate airborne dust.

**-Respiratory Protection :**

When Ventilation is inadequate, wear approved respirators following requirements found in OSHA's respiratory standard 29 CFR 1910. 134 and ANSI's standard A88.2-1992 for respirator protection.

**-Protective Gloves :**

Gloves suitable for protection against cuts from rough, sharp edges and from dust are

recommended.

**-Other protective clothing or Equipment :**

No special protective clothing is required.

**-Work/Hygienic Practices :**

To prevent drying of skin, wear gloves during exposure to dust or frequently wash hands to remove residual dust. Use hand lotion to moisten hands.



**Important :**

The information and data contained in this document are believed to be accurate and have been compiled from sources believed to be accurate. All materials may present unknown hazards and should be used with caution. Since the information contained in this documents may be applied under conditions beyond our control, we can accept no responsibility for any loss or danger caused by and person acting or refraining from actions as result of this information.



# **Antibacterial Test Report for Clean Touch Surface**

**Melatone Ltd.**

**692-10 GOJAN-DONG, NAMDONG-KU,  
INCHEON, KOREA**

**WWW.MELATONE.CO.KR**

**PHONE: 82-32-811-8620**

**FAX: 82-32-811-8625**

---

---

## 1 Testing

IFAM tested two coating systems according to JIS Z 2801-2012 (ISO 22196-2011).

In consultation with the customer, the following test organisms were used for all the experiments. Table 1 lists the test organisms and their international reference numbers.

**Table 1: Test organisms**

---

<b>Organisms</b>	<b>Sample Number</b>
<b>Escherichia coli</b>	ATCC 8739, DSMZ 1576
<b>Staphylococcus aureus</b>	ATCC 6538P, DSMZ 346
<b>Salmonella choleraesuis</b> <b>(Salmonella enterica)</b>	subsp. enterica Serovar Typhimurium (Syn. <i>Salmonella choleraesuis</i> ) DSMZ 5569
<b>Pseudomonas aeruginosa</b>	DSMZ 1253

---

---

## 2 Coating systems

The test parameters prescribed by the standard are shown in Table 2.

**Table 2: Test parameters according to JIS Z 2801 (ISO 22196)**

Parameter	Description
Reference	50 x 50 x 2 mm, Glass
Samples	50 x 50 x 0.15 mm, Coating
Film	40 x 40 x 0.05 mm PE-Foil (16 cm <sup>2</sup> )
Suspension medium	400 µL 1/500 nutrient broth (NB)
Temperature and contact time	36°C, 24 h
Flush medium / neutralization	9.6 mL SCDLP broth
Kultivierugsmedium	Hefeextrakt-Pepton-Agar (HEA)
Evaluation process	Verdünnungsreihe, Plattengussverfahren (ISO 6222)

Except for slightly elevated viable cell counts per cm<sup>2</sup> (U<sub>0</sub>) for *Escherichia coli* (2.75 x 10<sup>4</sup>) and *Salmonella enterica* (3.25 x 10<sup>4</sup>), the test and validation parameters corresponded to the values set down in the standard.

The slightly elevated values had no influence on the test result because even for these test organisms there was complete reduction of the viable cell counts down to the detection limit.

---

---

**Table 3: Test results for antimicrobial activity (log-Reduction, R)**

Organism	Reference		Sample 1		Sample 2	
	$U_0$	$U_t$	$A_t$	$R>^*$	$A_t$	$R>^*$
Escherichia coli	4.44	5.99	-0.20	<b>6.15</b>	-0.19	<b>6.18</b>
Salmonella enterica	4.51	5.52	-0.19	<b>5.72</b>	-0.22	<b>5.74</b>
Staphylococcus aureus	4.38	4.19	-0.17	<b>4.36</b>	-0.24	<b>4.43</b>
Pseudomonas aeruginosa	4.29	6.46	-0.25	<b>6.71</b>	-0.23	<b>6.79</b>

\*  $R = (U_t - U_0) - (A_t - U_0)$

### 3 Conclusions

Tests according to ISO 22196 show that sample 1 and sample 2 coatings had **very high antimicrobial activity** ( $R > 3$ ) for all the bacteria that were tested.

After 24 h contact time on the two coatings, more than 99.99% of the original bacteria were no longer detectable (namely the concentration was below the statistical detection limit of 10 cells per 400  $\mu$ L suspension medium).



# TEST REPORT

1. No : CT15-118365

2. Client

○ Name : MELATONE LTD.

○ Address : #692-10, Gojan-dong, Namdong-ku, Incheon, Korea

3. Date of Test : 2015.11.09 ~ 2015.11.24

4. Use of Report :

5. Test Sample : HPL - Clean Touch(Anti-fingerprint)



6. Test Method

(1) KS M 3332:2009

(2) KS M 3803:2009

Reissuance (R1)

Date : Dec 14, 2015

Affirmation	Tested By Name : Sang Hee Seo 	Technical Manager Name : Ha, Keum Suk 
Our report apply only to the standards or procedures identified and to the sample(s) tested unless otherwise specified. The test results are not indicative of representative of the qualities of the lot from which the sample was taken or of apparently identical or similar products.		

2015.11.24

Korea Conformity Laboratories

President Kyung Sik Kim 

Address : 215-91 85,Dambang-ro,Namdong-gu,Incheon,Korea 82-32-460-5100

Result Inquiry : Wood & Furniture Reseach Center 82-32-460-5152

# TEST REPORT

No :CT15-118365

## 7. Test Results

### 1) HPL - Clean Touch(Anti-fingerprint)

Test Item(s)	Unit	Test method	Test Results	Remark
Resistance to hot water	-	(1)	No defect	(19.5 ± 0.5) °C, (50 ± 1) % R.H.
Resistance to boiling water - Rate of increase in mass	%	(1)	5	(19.5 ± 0.5) °C, (50 ± 1) % R.H.
Resistance to boiling water - Rate of increase in thickness	%	(1)	10	(19.5 ± 0.5) °C, (50 ± 1) % R.H.
Resistance to boiling water - Resistance to interlaminar peeling	-	(1)	No defect	(19.5 ± 0.5) °C, (50 ± 1) % R.H.
Heat resistance	-	(1)	No change	(19.5 ± 0.5) °C, (50 ± 1) % R.H.
Stain resistance - black tea	-	(1)	No change	(19.5 ± 0.5) °C, (50 ± 1) % R.H.
Stain resistance - coffee	-	(1)	No change	(19.5 ± 0.5) °C, (50 ± 1) % R.H.
Stain resistance - milk	-	(1)	No change	(19.5 ± 0.5) °C, (50 ± 1) % R.H.
Stain resistance - 1 % iodine alcohol solution	-	(1)	No change	(19.5 ± 0.5) °C, (50 ± 1) % R.H.
Stain resistance - vinegar	-	(1)	No change	(19.5 ± 0.5) °C, (50 ± 1) % R.H.
Stain resistance - 10 % citric acid aqueous solution	-	(1)	No change	(19.5 ± 0.5) °C, (50 ± 1) % R.H.
Stain resistance - gasoline	-	(1)	No change	(19.5 ± 0.5) °C, (50 ± 1) % R.H.
Stain resistance - acetone(industrial)	-	(1)	No change	(19.5 ± 0.5) °C, (50 ± 1) % R.H.
Stain resistance - olive oil	-	(1)	No change	(19.5 ± 0.5) °C, (50 ± 1) % R.H.
Stain resistance - 10 % ammonia solution	-	(1)	No change	(19.5 ± 0.5) °C, (50 ± 1) % R.H.
Stain resistance - crayon	-	(1)	No change	(19.5 ± 0.5) °C, (50 ± 1) % R.H.
Stain resistance - shoe polish	-	(1)	No change	(19.5 ± 0.5) °C, (50 ± 1) % R.H.
Stain resistance - dye	-	(1)	No change	(19.5 ± 0.5) °C, (50 ± 1) % R.H.
Stain resistance - office ink	-	(1)	No change	(19.5 ± 0.5) °C, (50 ± 1) % R.H.
Stain resistance - 2 % merbromin aqueous solution	-	(1)	No change	(19.5 ± 0.5) °C, (50 ± 1) % R.H.
Stain resistance - phenol aqueous solution	-	(1)	No change	(19.5 ± 0.5) °C, (50 ± 1) % R.H.
Stain resistance - Acid sulfate sodium saturated aqueous solution	-	(1)	No change	(19.5 ± 0.5) °C, (50 ± 1) % R.H.
Stain resistance - pine resin	-	(1)	No change	(19.5 ± 0.5) °C, (50 ± 1) % R.H.
Wear resistance - Wear value	g/100 Rev.	(1)	0.06	(19.5 ± 0.5) °C, (50 ± 1) % R.H.
Wear resistance - Wear amount	number	(1)	775	(19.5 ± 0.5) °C, (50 ± 1) % R.H.
Ball impact resistance(The height of the Metal ball : 100 mm)	-	(1)	No crack	(19.5 ± 0.5) °C, (50 ± 1) % R.H.

# TEST REPORT

No :CT15-118365

## 7. Test Results

Tensile strength	Mpa	(1)	69	(19.5 ± 0.5) °C, (50 ± 1) % R.H.
Scratch hardness	g	(1)	120	(19.5 ± 0.5) °C, (50 ± 1) % R.H.
Light resistance - Appearance	-	(2)	No defect	-
Light resistance - Color difference( $\Delta E^*ab$ )	-	(2)	0.3	-

► Light resistance condition

1. Fade - 0 - Meter, Carbon Arc Type
2. Test Duration : 48 h
3. (63 ± 3) °C Black Panel Temperature
4. (50 ± 5) % R.H.

---- End of Report ----