

TEST REPORT

CLIENT: LEE & SON LEATHER (2000) CO., LTD.
56 SOI INTHAMARA 38, PRACHASUK ROAD,
RATCHADAPHISEK, DINDAENG, BANGKOK 10400

REPORT NUMBER: G 3289/65
DATE OF RECEIPT: 13/06/22
DATE OF TEST: 13/06/22-27/06/22
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SAMPLE NUMBER: G 3289-1/65
SAMPLE DESCRIPTION: -

SAMPLE NAMES (AS SPECIFIED BY THE CLIENT)
MARINE GRADE PVC

G 3289-1/65

COLOR FASTNESS TO ACIDS : AATCC TM 6: 2021			
COLOR CHANGE (RATING)			
- ACETIC ACID			4.5
- HYDROCHLORIC ACID			4.5
REMARK(S):	- RATING		
	5	=	NO COLOR CHANGE / STAINING
	4	=	SLIGHTLY COLOR CHANGE / STAINING
	3	=	NOTICEABLE COLOR CHANGE / STAINING
	2	=	CONSIDERABLE COLOR CHANGE / STAINING
	1	=	EXCESSIVE COLOR CHANGE / STAINING

COLOR FASTNESS TO ORGANIC SOLVENTS: ISO 105-X05: 1994			
COLOR CHANGE (RATING)			4
COLOR STAINING (RATING)			
- ACETATE			4-5
- COTTON			4-5
- NYLON			4-5
- POLYESTER			4-5
- ACRYLIC			4-5
- WOOL			4-5

REMARK(S): SOLVENT: PERCHLOROETHYLEN

COLOR FASTNESS TO WATER:SEA: AATCC TM 106-2009e(2013)e3			
COLOR CHANGE (RATING)			4.5
COLOR STAINING (RATING)			
- ACETATE			4.5
- COTTON			4.5
- NYLON			4.5
- POLYESTER			4.5
- ACRYLIC			4.5
- WOOL			4.5

COLOR FASTNESS TO CHLORINATED WATER : ISO 105-E03 : 2010(E)			
COLOR CHANGE (RATING)			4-5

REMARK(S): - THE ACTIVE CHLORINE 20 mg/l

AUTHORIZED BY

Pornpimon N.

(MS. PORNPIMON NGAOSAENGTHUM)
(TEXTILE TESTING LABORATORY MANAGER)

255168

“การปลอมรายงานผลการทดสอบ ไม่ว่าจะเป็นการปลอมทั้งฉบับหรือแต่ส่วนหนึ่งส่วนใด หรือใช้รายงานผลการทดสอบปลอม เป็นความผิดตามประมวลกฎหมายอาญา”

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ABRASION RESISTANCE OF TEXTILE FABRIC (ROTARY PLATFORM, DOUBLE HEAD METHOD) : ASTM D 3884 : 2009

APPEARANCE AFTER ABRASION 2,000 RUBS

- COLOR CHANGE (RATING)

4

- APPEARANCE AFTER ABRASION

SLIGHTLY COLOR CHANGE

REMARK(S):
- TEST APPARATUS : TABER 5155 ABRASER-DUAL ROTARY PLATFORM ABRASER
- ABRASION ROLLER : CS-10
- SPEED : 72 rpm
- PRESSING LOAD : 1,000 g FOR ONE ROLLOR
- STATE OF TEST SPECIMEN : CONDITIONED TESTING AT 20±1°C, 65±2% RH
- GRAY SCALE FOR COLOR CHANGE WAS USED FOR THE COLOR CHANGING EVALUATION.

APPEARANCE AFTER UV EXPOSURE

APPEARANCE AFTER UV EXPOSURE 48 HOURS

- COLOR CHANGE (RATING)

TEST SPECIMEN 1

TEST SPECIMEN 2

TEST SPECIMEN 3

4

4

4

REMARK(S):
- EXPOSURE CONDITION : ASTM G154 : 2006, CYCLE 1
- TEST APPARATUS : ATLAS UV TEST™
- LAMP : UVA-340
- TYPICAL IRRADIANCE : 0.89 W/m²/nm
- APPROXIMATE WAVELENGTH : 340 nm
- EXPOSURE CYCLE : 8 HOURS UV AT 60±3°C BLACK PANEL TEMPERATURE;
4 HOURS CONDENSATION AT 50±3°C BLACK PANEL TEMPERATURE
- TOTAL EXPOSURE : 48 HOURS
- GRAY SCALE FOR COLOR CHANGE WAS USED FOR THE COLOR CHANGING EVALUATION.

APPEARANCE AFTER COLD RESISTANCE

APPEARANCE AFTER COLD RESISTANCE (-15° C FOR 48 HOURS)

- APPEARANCE

TEST SPECIMEN 1

TEST SPECIMEN 2

TEST SPECIMEN 3

NO CRACK

NO CRACK

NO CRACK

- COLOR CHANGE (RATING)

4-5

4-5

4-5

REMARK(S):
- TEST APPARATUS : TEMPERATURE AND HUMIDITY CHAMPER ACS MODEL DM 1200 C
- TEST METHOD SPECIFIED BY THE CLIENT
- GRAY SCALE FOR COLOR CHANGE WAS USED FOR THE COLOR CHANGING EVALUATION.

255167

“การปลอมรายงานผลการทดสอบ ไม่ว่าจะเป็นการปลอมทั้งฉบับหรือแต่ส่วนหนึ่งส่วนใด หรือใช้รายงานผลการทดสอบปลอม เป็นความผิดตามประมวลกฎหมายอาญา”

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G 3289-1/65	
FLAMMABILITY: BS 5852: 2006 CLAUSE 11 (IGNITION SOURCE 0)	
FLAMMABILITY AFTER WATER-SOAKED	
- PROGRESSIVE SMOULDERING IGNITION	NO
- FLAMING IGNITION	NO
- RESULT	NI/0

REMARK(S): - THE FOLLOWING TEST RESULTS RELATE ONLY TO THE IGNITABILITY OF THE COMBINATION OF UPHOLSTERY COMPOSITES (BS 5852:2006 CLAUSE 11) UNDER THE PARTICULAR CONDITIONS OF TEST STATED; THEY ARE NOT INTENDED AS A MEANS OF ASSESSING THE FULL POTENTIAL FIRE HAZARD OF THE MATERIALS OR PRODUCTS IN USE.

- NI = NON IGNITION

- THE FOAM TYPE USED OF TEST IS VP45 (NON-FLAME RETARDANT).

REQUIREMENT OF BS 5852 : 2006 CRITERIA OF IGNITION

- PROGRESSIVE SMOULDERING IGNITION FOR IGNITION SOURCE 0: ANY TEST SPECIMEN THAT DISPLAYS ESCALATING SMOULDERING COMBUSTION BEHAVIOUR SO THAT IT IS UNSAFE TO CONTINUE THE TEST AND FORCIBLE EXTINCTION IS REQUIRED, ANY TEST SPECIMEN THAT PRODUCES EXTERNALLY DETECTABLE AMOUNTS OF SMOKE, HEAT OR GLOWING WITHIN THE PERIOD FROM THE EXTINCTION OF THE SOURCE UNTIL 60 MINUTES AFTER PLACEMENT OF THE SOURCE AND ANY TEST SPECIMEN THAT, ON FINAL EXAMINATION SHOWS EVIDENCE OF CHARRING WITHIN THE FILLING MORE THAN 100 mm. IN ANY DIRECTION, APART FROM UPWARDS, FROM THE NEAREST PART OF THE ORIGINAL POSITION OF THE SOURCE.

- FLAMING IGNITION FOR IGNITION SOURCE 0: ANY TEST SPECIMEN THAT DISPLAYS ESCALATING FLAMING COMBUSTION BEHAVIOUR SO THAT IT IS UNSAFE TO CONTINUE THE TEST AND FORCIBLE EXTINCTION IS REQUIRED, ANY TEST SPECIMEN THAT BURNS UNTIL IT IS ESSENTIALLY CONSUMED WITHIN THE TEST DURATION AND ANY TEST SPECIMEN ON WHICH ANY FLAME FRONT REACHES THE EXTREMITIES OF THE SPECIMEN OTHER THAN THE TOP OF THE VERTICAL PART OF THE TEST

255160

“การปลอมรายงานผลการทดสอบ ไม่ว่าจะเป็นการปลอมทั้งฉบับหรือแต่ส่วนหนึ่งส่วนใด หรือใช้รายงานผลการทดสอบปลอม เป็นความผิดตามประมวลกฎหมายอาญา”

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G 3289-1/65	
FLAMMABILITY: BS 5852: 2006 CLAUSE 11 (IGNITION SOURCE 1)	
FLAMMABILITY AFTER WATER-SOAKED	
- PROGRESSIVE SMOULDERING IGNITION	NO
- FLAMING IGNITION	NO
- RESULT	NI/1

REMARK(S) :

- THE FOLLOWING TEST RESULTS RELATE ONLY TO THE IGNITABILITY OF THE COMBINATION OF UPHOLSTERY COMPOSITES(BS 5852:2006 CLAUSE 11) UNDER THE PARTICULAR CONDITIONS OF TEST STATED; THEY ARE NOT INTENDED AS A MEANS OF ASSESSING THE FULL POTENTIAL FIRE HAZARD OF THE MATERIALS OR PRODUCTS IN USE.
- NI = NON IGNITION
- THE FOAM TYPE USED OF BUTANE FLAME TEST IS VP45 (NON-FLAME RETARDANT).
- GAS FLOW RATE : 45 ± 2 ml/min AT 25°C
- GAS BURN TIME : 20 SECONDS

REQUIREMENT OF BS 5852 : 2006 CRITERIA OF IGNITION

- PROGRESSIVE SMOULDERING IGNITION FOR IGNITION SOURCE 1: ANY TEST SPECIMEN THAT DISPLAYS ESCALATING SMOULDERING COMBUSTION BEHAVIOUR SO THAT IT IS UNSAFE TO CONTINUE THE TEST AND FORCIBLE EXTINCTION IS REQUIRED, ANY TEST SPECIMEN THAT SMOULDERS UNTIL IT IS ESSENTIALLY CONSUMED OR THAT SMOULDERS TO THAT EXTREMITIES OF THE SPECIMEN WITHIN THE DURATION OF THE TEST AND ANY TEST SPECIMEN THAT, ON FINAL EXAMINATION SHOWS EVIDENCE OF CHARRING WITHIN THE FILLING MORE THAN 100 mm. IN ANY DIRECTION, APART FROM UPWARDS, FROM THE NEAREST PART OF THE ORIGINAL POSITION OF THE SOURCE.
- FLAMING IGNITION FOR IGNITION SOURCE 1: ANY TEST SPECIMEN THAT DISPLAYS ESCALATING FLAMING COMBUSTION BEHAVIOUR SO THAT IT IS UNSAFE TO CONTINUE THE TEST AND FORCIBLE EXTINCTION IS REQUIRED, ANY TEST SPECIMEN THAT BURNS UNTIL IT IS ESSENTIALLY CONSUMED WITHIN THE TEST DURATION AND ANY TEST SPECIMEN ON WHICH ANY FLAME FRONT REACHES THE EXTREMITIES OF THE SPECIMEN OTHER THAN THE TOPOF THE VERTICAL PART OF THE TEST

255161

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ANTIBACTERIAL ACTIVITY ON PLASTICS AND OTHER NON-POROUS SURFACES: ISO 22196: 2011

TESTED MICROORGANISM	U_t	A_t	ANTIBACTERIAL ACTIVITY (R)
- <i>Staphylococcus aureus</i> ATCC 6538	4.63	-0.20	4.83

REMARK(S): - TEST SPECIMEN WAS TESTED AS RECEIVED.

- ANTIBACTERIAL ACTIVITY (R) = $U_t - A_t$

WHERE: U_t : THE AVERAGE OF THE COMMON LOGARITHM OF THE NUMBER OF VIABLE BACTERIA, IN CELL/CM², RECOVERED FROM THE UNTREATED TEST SPECIMENS (PE FILM) AFTER 24 H.

A_t : THE AVERAGE OF THE COMMON LOGARITHM OF THE NUMBER OF VIABLE BACTERIA, IN CELL/CM², RECOVERED FROM THE TREATED TEST SPECIMENS AFTER 24 H.

255162

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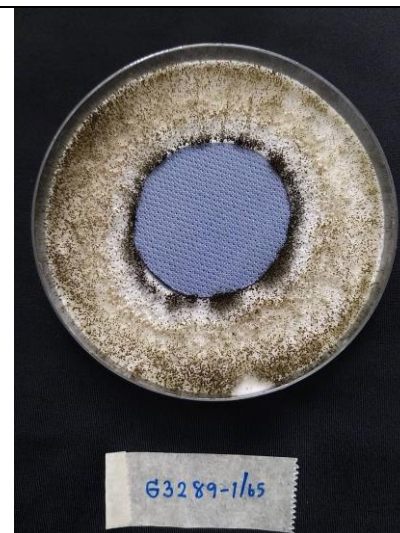
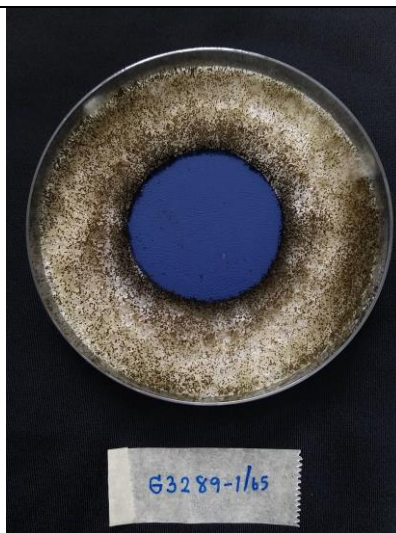
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ANTIFUNGAL ACTIVITY, ASSESSMENT ON TEXTILE MATERIAL: AATCC TM 30: 2017e (TEST III)

TESTED FUNGI:

OBSERVED GROWTH

- *Aspergillus niger* ATCC 6275

REMARK(S):

- TEST SPECIMEN WAS TESTED AS RECEIVED.
- TEST MEDIA : MINERAL SALTS AGAR (HIMEDIA) + 3.0 % GLUCOSE
- INCUBATION CONDITION : TEMPERATURE OF 28 ± 1 °C FOR 7 DAYS
- THE TEST SPECIMEN IS NON-POROUS; THE FUNGAL SPORES MAY NOT HAVE ACCESS TO MINERALS OR NUTRIENTS IN THE AGAR PLATE. THIS MAY CAUSE A LACK OF FUNGAL GROWTH ON THE TEST SPECIMEN AND CAUSE MISLEADING RESULTS.

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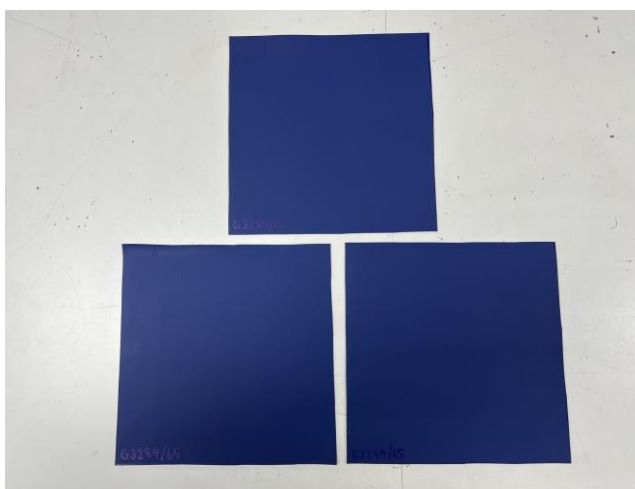


FIGURE 1: G 3289-1/65 BEFORE TEST COLD RESISTANCE

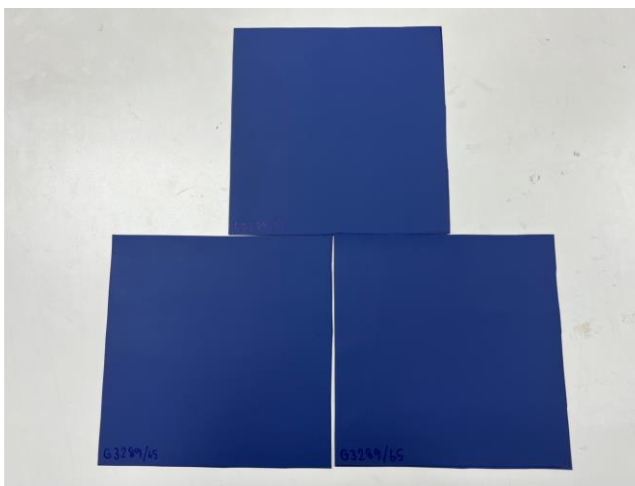


FIGURE 2: G 3289-1/65 AFTER TEST COLD RESISTANCE

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