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TEST REPORT

PRODUCT: FT 1149X
SUPPORT: 2 MIL PET
SUBSTRATE: ABS
CERT NO.: 230109 - 1039



FCA MS-CC-240
OEM Rev Date: Jul 16
Adhesion - Pressure Sensitive - Transfer Film

3.1 Physical Properties and Tests

Table 1 - Physical Properties

SECTION: **Adhesive Thickness**
0.10 to 0.15 mm (.004 to .006 in)

Specification	Results	Status
> 0.1 < 0.15 mm	0.13	Pass

SECTION: **Adhesive Softening Point** LP-463TB-14-01*
30 min @ 54°C under TBD Load, Ramped 8°C every 30 mins

Specification	Results	Status
79°C min	Not Tested	Not Tested

SECTION: **Minimum Application Temperature**
16°C

Specification	Results	Status
16°C min	18	Pass

SECTION: **Recommended Application Temperature**
21°C to 38°C

Specification	Results	Status
> 21°C < 38°C	23	Pass

SECTION: **Release Liner** LP-463PB-13-01*
Adhesive Softening Point

Specification	Results	Status
No Detrimental Paint Repair Effects	Easily Removes Without Damage	Pass

3.1 Physical Properties and Tests

Table 2 - Physical Properties

3.2 90 Degree Peel Test

SECTION: **Adhesion**

20 mins @ RT LP-463TB-03-01 B*
24 hrs @ RT LP-463TB-03-01 B*
250 hrs @ 79°C LP-463CB-10-01*
100 hrs @ 38°C / 100% RH ASTM D1735*
Cycles (3x) 24 hrs @ 79°C LP-463CB-10-01*
24 hrs @ 38°C / 95% RH
24 hrs @ -29°C

Specification	Results	Status
0.44 N / mm	1.0	Pass
0.53 N / mm	0.8	Pass
0.88 N / mm	1.5	Pass
0.7 N / mm	1.1	Pass
0.7 N / mm	1.6	Pass

3.3 Vehicle Interior Air Quality

Table 3 - Vehicle Interior Air Quality Material Performance Requirements

SECTION: **1.1 Odor**

Dry, 1 hr @ 79°C LP-463KC-09 01
Wet, 1 hr @ 79°C - Deionized Water

Specification	Results	Status
0.7 N / mm	3 Noticeably Changed 4 Slightly Changed	Pass Pass

SECTION: **1.2 Fogging** SAE J1756
6 hrs @ 95°C, 21°C Cooling 16 hrs @ RT

Specification	Results	Status
70 Units	100	Pass

SECTION: **1.3 Aldehyde Evaluation** CS-13398
24 hrs Uncovered @ 23°C / 50% RH Formaldehyde
Acetaldehyde
Acrolein
Sum of C2-C8 Carbonyls

Specification	Results	Status
Report mg / kg	0.868 0.000 0.000 0.000	Reported Reported Reported Reported

SECTION: **1.4 Volatile Organic Compounds (VOC's)** CS-13398
24 hrs Uncovered @ 23°C / 50% RH Benzene

Specification	Results	Status
Report ug / g	0.218	Reported

SECTION: **1.5 Semi Volatile Organic Compounds (SVOC's)**
24 hrs Uncovered @ 23°C / 50% RH

Specification	Results	Status
Report ug / g	BDL - Below detection limitations based on a toluene surrogate	Reported

CERTIFIED BY:

Dave Nichols Jr, Automotive Lab Technician

ISSUE DATE:

1-1-24

Materials tested to OEM requirements @ 72°F +/- 2°F and 50% RH +/- 5%. Test uncertainty and minor exclusions are available online or upon request.
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Status opinion based upon measurements obtained by personnel with appropriate training and professional experience.
This laboratory is not accredited for the calibrations or tests marked *.