



VACFORMABLE CHROME - TECHNICAL DATA SHEET

DESCRIPTION	TEST	METHOD RESULTS
Florida-1 year	BI 160-01	Pass
Arizona-1 year	BI 160-01	Pass
Xenon (1000K)	BO 101-01	Pass
Salt spray resistance	ESB-M5P10-A 3.5.6	Pass
Flexibility at 23° +/-2C*	ESB-M5P10-A 3.7	Pass
Topcoat stability	ESB-M5P10-A 3.9	Pass
Water resistance	ESB-M5P10-A 3.10.2	Pass
Humidity	ESB-M5P10-A 3.10.3	Pass
Cleaners & Wax resistance	ESB-M5P10-A 3.10.4	Pass
Water spot & soap	ESB-M5P10-A 3.10.5	Pass
Gasoline resistance	ESB-M5P10-A 3.10.6	Pass
Oil resistance	ESB-M5P10-A 3.10.7	Pass

RCL's vacformable CHROME is a thermoplastic, interior and exterior film laminate used to take the place of chrome plating on plastic automotive trim parts. Designed to be used in low stretch applications -- the distinctiveness of the image will be reduced on parts where stretch levels are higher than 50% -- therefore, not recommended.

HANDLING AND STORAGE RECOMMENDATIONS:

CHROME products should be handled with care and stored on pallets. The material should be wrapped accordingly so to prevent moisture absorption and not stored in places with high humidity or extreme temperatures. Temps below 0°C (32°F) and over 35°C (95°F) should be avoided. If materials are stored under high humidity conditions (above 80°) for extended periods, pre-drying may be required to guarantee optimal quality after being processed. Dry for approximately 24-48 hours in a circulation oven at 60°C (140°F).

TO AVOID SURFACE DAMAGING, SEE THE FOLLOWING RECOMMENDATIONS:

- Do not stack, use soft tissue or cloth between each part.
- Wear soft or latex gloves.
- Avoid sharp objects
- Avoid dirt, dust and contamination using anti-static devices designed for clean room atmospheres.



VACFORMABLE CHROME - TECHNICAL DATA SHEET

RCL's vacformable CHROME is a thermoplastic, interior and exterior film laminate used to take the place of chrome plating on plastic automotive trim parts. Designed to be used in low stretch applications -- the distinctiveness of the image will be reduced on parts where stretch levels are higher than 50% -- therefore, not recommended.

HANDLING AND STORAGE RECOMMENDATIONS:

CHROME products should be handled with care and stored on pallets. The material should be wrapped accordingly so to prevent moisture absorption and not stored in places with high humidity or extreme temperatures. Temps below 0°C (32°F) and over 35°C (95°F) should be avoided. If materials are stored under high humidity conditions (above 80%) for extended periods, pre-drying may be required to guarantee optimal quality after being processed. Dry for approximately 24-48 hours in a circulation oven at 60°C (140°F).

TO AVOID SURFACE DAMAGING, SEE THE FOLLOWING RECOMMENDATIONS:

- Do not stack, use soft tissue or cloth between each part.
- Wear soft or latex gloves.
- Avoid sharp objects
- Avoid dirt, dust and contamination using anti-static devices designed for clean room atmospheres.

PROCESSING RECOMMENDATIONS:

No special equipment is necessary. Protective carrier is to be removed from sheet prior to Vacuum Forming. Existing thermoforming and molding equipment can be used -- however, molds should be made or modified to accept film in the cavity. Robotic laser trimming/cutting with hydromechanical die-trimming press is recommended or accomplished through in-line with the thermoforming process or following.

THERMOFORM PROCESS CONDITIONS:

- Heat ONLY on substrate side.
- No direct heat to the film (chrome laminate side).
- Substrate must be kept moisture free.
- Ideal laminate temp (ABS side) 140°C-182°C (285°F-360°F).
- Vacuum mold temp 35°C-40°C (95°F-105°F)



VACFORMABLE CHROME - TECHNICAL DATA SHEET

INJECTION MOLDING CONDITIONS:

- Film side of mold 35°C-40°C (95°F-105°F).
- Non-film side of mold-see ST technical data sheets for TECHRAN series.

TROUBLESHOOTING:

- Surface blushing, rainbow iridescence look:
Laminate surface temperature is too high. Decrease temperature or check to verify that there is no top heat on laminate side.
- Blistering (cracks, bumps, lines) on laminate surface:
Laminate surface may be too hot. ABS may have absorbed moisture--dry if necessary.
- Surface dulls, black appearance or low distinctiveness of image
Material may be over stretched. Check part or mold design.

NOTE: Information is considered recommended guidelines only. RCL assumes no responsibility in connection with processing of material. All material needs to be prototyped and tested by customer in order to see if suitable for their process and application.