

# Twilite

Mid-dark trivalent decorative chromium process



**Twilite** is a REACH compliant trivalent chromium plating process. It delivers a mid-dark durable chromium deposit with excellent corrosion resistance.

Designers of automotive trim appreciate the appeal that a mid-dark coating gives to their vehicles. Typically, organic finishes are applied over bright electroplated finishes to achieve the desired appeal. However, when compared to the **Twilite** finish, organic coatings do not have the quality 'feel' that metallic coatings give. **Twilite** coatings also provide good resistance to exterior impact damage.

When used in combination with MacDermid Enthone satin or bright nickel process and our **DUR NI**<sup>®</sup> microporous noble nickel, **Twilite** provides excellent **CASS** performance and meets current automotive standards. The process also exhibits good resistance to its attack from calcium chloride containing salts.

## Twilite, unrivaled innovation

- Fast plating speeds
- Automotive approved mid-dark coating
- Sulfate based trivalent chromium solution
- Meets ELV 2000/53/EC, WEEE 2002/96/EC, RoHS 2002/95/EC





## Twilite performance

Basis: sulfate; mid-dark.

With post-dip*	
	240
CASS	80 hours
Russian Mud	Passes

Twilite is approved by leading global automotive manufacturers such as BMW, FCA, Ford, Honda, Hyundai, Nissan, Renault, SAIC, Toyota and TRW.

- Color values measured under production conditions:
  - L\* : 64 - 69
  - a\* : 0.3 - 0.6
  - b\* : 2.6 - 5.7
- Plating speed: 3 min = 0.2 - 0.3µm



## Twilite, unrivaled innovation

Feature	Benefit
• Mid-dark chromium coating	• Alternative to bright nickel • Durable finish for exterior applications
• Trivalent chromium with low solution concentration	• Eliminates exposure to hexavalent chromium • Reduced waste water treatment costs
• Fast plating speeds	• Can be incorporated into most existing plating lines
• Meets ELV 2000/53/EC, WEEE 2002/96/EC, RoHS 2002/95/EC	• Recommended for use in automotive, sanitary and consumer electronic applications

### \*Post-treatment

TRILYTE® CP 3000 is an environmentally-compliant chromium-free post dip for electroplated trivalent chromium deposits. It significantly improves the corrosion resistance of the decorative coating system.

Performance in standard corrosion tests such as NSS and CASS are improved by applying TRILYTE CP 3000 on top of the electroplated chromium layers without affecting part appearance.