

# CONSOL POLYMERIC-055

CATHODIC ELECTROPHORETIC  
LACQUER PROCESS



- ◆ High Clarity, Stable Polymeric Cathodic Electrophoretic Lacquer Process for Clear Bright coatings
- ◆ Suitable over polished base metals or plated deposits of most metals to Protect, Enhance and Sustain.
- ◆ High wear resistance, Rub test performance and SST life
- ◆ Can replace expensive PU Coatings where high rub test is the norm.
- ◆ Can be applied as a Clear coat or as Colour coats
- ◆ Stable coating without yellowing and highly suitable over polished or plated Silver articles.
- ◆ Colour shades such as 24K Gold, Brass, Copper, Antique finishes, Black, Blue and several others are possible.



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## FEATURES AND BENEFITS

### **CONSOL POLYMERIC - 055**

**High Clarity Polymeric Cathodic Electrophoretic Lacquer Process for clear Bright Coating with high wear and rub test performance.**

- A Stable, Polymeric, well proven cathodic electrophoretic lacquering process suitable for use over polished base metals or plated deposits of most metals to Protect, Enhance and Sustain.
- Correctly Cured Lacquer coating has high gloss, good clarity, free from orange peel, excellent hardness, more durability, higher solvent resistance and wear resistance.
- Typical applications include jewelry, giftware, hardware, lamps, consumer durables, door handles. For high quality decorative finishes requiring service protection.
- Accepts Consol dyes for colored deposits and is the norm for high performance finish.
- User friendly processing with wide operating conditions, enables process to run smoothly and trouble free.

<b>Solid Content</b>	-	7 – 8 %
<b>Bath Solvent</b>	-	2 – 3 %
<b>pH</b>	-	4.8 – 5.2
<b>Temperature</b>	-	24° – 26° C.
<b>Voltage applied</b>	-	20 – 90 V.
<b>Anode</b>	-	316 Grade SS.
<b>Curing</b>	-	140 – 155°C & 25 Min.

*Performance test results on brass panel 10 – 12 microns of coating, cured at 170°C for 30 min.*

Test	Standard	Performance Result
<b>Corrosion Resistance JIS H – 8617</b>	400 Hrs in 5% Neutral salt spray	<b>Passed</b>
	240 Hrs 5% NaOH soln.	<b>Passed</b>
	120 Hrs 5% H <sub>2</sub> SO <sub>4</sub> Soln.	<b>Passed</b>
<b>Artificial Perspiration Test</b>	ASTM D 2204	<b>Passed</b>
<b>Lactic Acid Test</b>	20 HRS	<b>Passed</b>
<b>Hardness</b>	Pencil Mitsubishi Hi Uni Pencil 4 H	<b>Passed</b>
<b>Bend</b>	JIS K 5400 6 16 180° On 2 mm Steel Bar	<b>Passed</b>
<b>Adhesion</b>	1 mm check Board –Apply & Remove Scotch Tape – Random	<b>Passed</b>
<b>Erickson Test – Solvent Resistance</b>	Xylene	<b>Passed</b>
	Toluene	<b>Passed</b>
<b>Cass Test</b>	168 Hrs	<b>Passed</b>
<b>SO<sub>2</sub> Gas Test</b>	100 HRS No. Corrosion	<b>Passed</b>
<b>Weathering Test JIS K 5400 6 17</b>	500 HR Open Exposure	<b>Passed</b>
<b>Porosity Test</b>	MS Panel With 10 Micron Coating DIP In 10% CuSO <sub>4</sub> Soln., @ 25 °C 22 Min – Pores Less Than 1 Per SQ. CM	<b>Passed</b>
<b>UV Loss</b>	Less Than 2% Thru 10 Micron Film	<b>Passed</b>
<b>Impact Resistance</b>	500 gms Steel Ball Free Fall 50 cms On MS Panel Flat Mounted φ 0.5 Inch Passed. No Crack.	<b>Passed</b>
<b>Rub Test</b>	MIBK. 750 Double RUBS Manual No Erosion. No Loss in Thickness	<b>Passed</b>

**Attention:** This sheet is only meant to provide Features and Benefits of the process mentioned. For detailed Usage, Please refer the product Technical Data Sheet. For Safety, handling and Chemical information please refer the Safety Data Sheet. These can be provided through a Consolidated Metal Finishing Pvt. Ltd. representatives or requesting us for the same by email.