

### **Infrared Drying/Curing Recommendations**

DuPont Refinish products can be successfully dried and cured with infrared (I.R.) heating equipment. When using infrared equipment, care must be taken to avid finish quality problems, such as blistering and solvent popping. The proper use of infrared equipment can maximize productivity with DuPont waterborne and high-solids, low-VOC products.

Infrared equipment is used immediately after paint application to dry and cure the finish. Infrared heat lamps are placed over the freshly painted surface at a specific angle and distance. The intense heat from the lamps dries and cures the finish when used according to recommended exposure times.

### 1. Infrared Safety Tips

- Use caution fixtures and bulbs become very hot.
- All portable infrared equipment is not explosion proof and cannot be used in spray booths where flammable solvents are sprayed.
- Use only heavy (#14 wire, minimum) industrial extension cords with electric infrared heaters. Do not use longer extension cords than those recommended by the equipment manufacturer.
- Make sure the electric circuit being used is of the proper wire size and has a properly sized fuse or circuit breaker for the equipment wattage and amperage.
- If the circuit breaker trips more than twice, do not continue to reset and use the circuit. The load (equipment wattage) must be reduced or the circuit must be upgraded.

### 2. Recommendations

It is up to the refinisher to determine the level of sophistication needed to optimize drying and curing with infrared equipment. Refinishers using infrared equipment routinely should invest in a durable piece of equipment with enough options to make it easy to work with. For refinishers using infrared equipment only as a backup or in emergencies, a less expensive version is suitable.

Most customers would probably benefit from a good quality quartz-tube type infrared heater. A multiple-tube heater head is desirable for even application of the infrared energy.

Some customers may have a "heat lamp" fixture that has incandescent bulbs in it. We suggest upgrading it with R-40 or G-30 infrared bulbs. Be careful not to exceed the wattage limit of the fixture.

### 3. Helpful Equipment Features

- Timers for automatic shutoff
- Lockable, heavy-duty casters
- Balanced weight design for all height settings
- Easily adjustable fixtures
- Adjustable power setting or voltage
- Long cord, so that an extension cord is not necessary

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# ChromaSystem<sup>™</sup> Technical Manual

**Correct Setup** 



### 4. Drying/Curing Tips

- Follow the paint application recommendations for film builds, flash times between coats, air pressure, etc.
- Follow the distance recommendation closely. If heaters are placed too close to the job, overheating will occur, resulting in possible blistering of the film.
- Apply the infrared heat as soon as possible after spraying the paint to minimize the chance of skinning over, which can result in solvent popping.
- Set up the heater at the recommended heater-to-substrate distance, then turn on the heater by setting the timer to the recommended drying time.
- Adjust multiple-tube fixtures to properly "cover" the wet, painted area. See the illustration below for proper overlap.

#### Incorrect Setup





# **Trisk Infrared Equipment Recommendations**

Product	Mixing Ratio	Color Description	Activator Hardener	Solvent	Flash-Off @ 20 " (Half Power)	Full Bake @ 20 '' (Full Power)	Total Cure Time
Primers							
URO <sub>®</sub> Prime	4:1:1	Beige	1125S	1130S	0 minutes	12-14 minutes	12-14 mins
ChromaFil₀	4:1	Gray	4175S	N/A	0 minutes	10-12 minutes	10-12 mins
Sealers							
Prime 'N Seal₀	1:1	Gray	2603S	N/A	5 minutes	4 minutes	9 mins
2340S Flexible Adhesion Sealer	4:1:1	Grav	123055	12385S	0 minutes	10 minutes	10 mins
ChromaPremier <sub>®</sub> Sealer	4:1:1.5	Gray	12305S	42475S	0 minutes	4 minutes	4 mins
Clears *							
V7500S ChromaClear∘Multi- Use	4:1	Clear	V7575S	N/A	5 minutes	15 minutes	20 mins
7600S/V7600S ChromaClear₀ Productive	4:1	Clear	7675S/V7675S	N/A	5 minutes	14 minutes	19 mins
7800S ChromaClear₀ High Glamour	4:1	Clear	7875S	N/A	0 minutes	18 minutes	18 mins
72200S ChromaPremier₀ Productive	3:1:30%	Clear	12305S	12385S	0 minutes	16 minutes	16 mins
Single Stage							
ChromaOne₀ "G" Quality	3:1:1	N/A	7005S	7085S	5 minutes	10 minutes	15 mins
ChromaPremier₀ "N" Quality	3:1	N/A	12305S	N/A	5 minutes	12 minutes	17 mins
Low VOC Products							
Primers							
210S Gray Waterborne Primer Surfacer	RTS	Gray	N/A	N/A	0 minutes	7-9 minutes	7-9 mins
2220S 1K Waterborne Primer Surfacer	RTS	Beige	N/A	N/A	0 minutes	10-12 minutes	10-12 mins
2440S 2K Waterborne Primer- Sealer	<i>I</i> .1	Grav	24055	NI/A	0 minutes	6.8 minutos	6.8 mins
Clears	4.1	Giay	24033	IN/A	0 minutes	0-0 minutes	0-0 111115
3500S ChromaClear <sub>®</sub> High Solid	s 3·1·109	6 Clear	35755	10855	0 minutes	20 minutes	20 mins
Single Stage	0.1.107		00700		o minutos	20 1111000	20 11110
ChromaOne₀ "E" Quality	3:1	N/A	3575S	N/A	5 minutes	16 minutes	21 mins
Imron∞5000	3:1	N/A	193S†	N/A	5 minutes	16 minutes	21 mins

\* ChromaBase<sup>®</sup> and ChromaPremier<sup>®</sup> basecoats do not require a separate infrared cure.

† Imron<sup>®</sup> 5000 must also contain 389S accelerator at a rate of 2 ounces per sprayable gallon.



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