

# Stages 3 & 4

## Catalyst Addition

| CATALYST USAGE CHART   |                |             |             |             |
|--|----------------|-------------|-------------|-------------|
| Deck/Resin temp  | 29-35°C        | 21-28°C     | 13-20°C     | 6-12°C      |
| Percentage Catalyst  | 1% Catalyst    | 2% Catalyst | 3% Catalyst | 4% Catalyst |
| Table of Percentages in Millilitres,<br>Per Weight of Resin Used |                |             |             |             |
| Amount of Resin  | Catalyst Usage |             |             |             |
| 1 Kilo   | 10 ml          | 20 ml       | 30 ml       | 40 ml       |
| 2 Kilo   | 20 ml          | 40 ml       | 60 ml       | 80 ml       |
| 3 Kilo   | 30 ml          | 60 ml       | 90 ml       | 120 ml      |
| 4 Kilo   | 40 ml          | 80 ml       | 120 ml      | 160 ml      |
| 5 Kilo   | 50 ml          | 100 ml      | 150 ml      | 200 ml      |
| 6 Kilo   | 60 ml          | 120 ml      | 180 ml      | 240 ml      |
| 7 Kilo   | 70 ml          | 140 ml      | 210 ml      | 280 ml      |
| 8 Kilo   | 80 ml          | 160 ml      | 240 ml      | 320 ml      |
| 9 Kilo   | 90 ml          | 180 ml      | 270 ml      | 360 ml      |
| 10 Kilo  | 100 ml         | 200 ml      | 300 ml      | 400 ml      |
| 11 Kilo  | 110 ml         | 220 ml      | 330 ml      | 440 ml      |
| 12 Kilo  | 120 ml         | 240 ml      | 360 ml      | 480 ml      |
| 13 Kilo  | 130 ml         | 260 ml      | 390 ml      | 520 ml      |
| 14 Kilo  | 140 ml         | 280 ml      | 420 ml      | 580 ml      |
| 15 Kilo  | 150 ml         | 300 ml      | 450 ml      | 600 ml      |
| 16 Kilo  | 160 ml         | 320 ml      | 480 ml      | 640 ml      |
| 17 Kilo  | 170 ml         | 340 ml      | 510 ml      | 680 ml      |
| 18 Kilo  | 180 ml         | 360 ml      | 540 ml      | 720 ml      |
| 19 Kilo  | 190 ml         | 380 ml      | 570 ml      | 760 ml      |
| 20 Kilo  | 200 ml         | 400 ml      | 600 ml      | 800 ml      |

### Catalyst Addition

There are a number of important rules of thumb to follow when deciding how much catalyst to add:

- Never use less than 1% even in the summer, just mix less resin at a time.
- Never use more than 4%, the gel time will not reduce any further beyond 4%.
- Never underestimate the effect of temperature. Resins will not cure at or below freezing and will always cure much quicker in direct sunlight.
- When topcoating late in the day, add more catalyst to allow for the lack of sunlight.
- In Winter use fast catalyst, in Summer use standard catalyst, in very hot conditions use LPT (Long Process Time) catalyst.
- Remember: Any catalysed resin left in the bucket will exotherm. Heat is generated as the resin cures, so it should be kept well away from other stored materials. Water can be poured over the resin to suppress the heat gain.
- Always mix the catalyst into the resin thoroughly before using the resin (i.e. a good couple of minutes for a 10 litre bucket.) Failure to do this can result in 'streaking' on the laminate, where streaks of uncured resin will remain visible and ultimately lead to a failure in the laminate.
- Fast cures can result in an inadequate bond.