

# COMPOTOOL Sealer Technical Data Sheet

## CTS101 and CTS202 Sealer System

The COMPOTOOL sealer system is a two-step application process that results in a very high temperature resistant, thermally stable finish that is smooth and glossy.

The COMPOTOOL CTS101 Stage 1 Sealer is a two pack spray on application that fills blemishes or scratches on the surface of the tooling board giving it a smooth and faired surface for excellent moulding condition. After application of the CTS101 the surface is coated with COMPOTOOL CTS202 sealing the micro-pores and gives a gloss finish to the COMPOTOOL surface.



### Key Features:

- High temperature resistance
- Matched hardness
- Easy and quick application
- Low odour
- Non-contaminating
- Durable surface

### Technical Information:

Properties	CTS101 Stage 1 Sealer Part A	CTH901 Stage 1 Sealer Hardener Part B	CTS202 Stage 2 Sealer
Appearance	Black liquid	Clear liquid	Clear liquid
Odour	Faint	Faint	Hydrocarbon/ketone
Flash Point	31°C (87.8° F)	31°C (87.8° F)	10°C (50° F)
Solvents	Xylene		Xylene
Estimated Coverage Mixed	3m <sup>2</sup> per litre (32 ft <sup>2</sup> per US Quart)		20m <sup>2</sup> per litre (200 ft <sup>2</sup> per US Quart)
Dry Film Thickness	Approximately 50 Micron per coat		Negligible
Shelf Life	12 Months		6 Months
Maximum Use Temperature	250°C (480°F)		

## Storage:

- Keep sealed when not in use
- Keep away from sources of ignition
- Store in a cool dry place and protected from frost

## Board Preparation:

1. Sand the surface of the COMPOTOOL board to a minimum of 320grit but can be as fine as 800 grade finish.
2. The surface of the COMPOTOOL board should be clean, dry and dust free. With a dry, oil-free air line gently dust off the surface being careful not to blow too many pits into the surface. Then wipe the surface with a wax and grease cleaning solvent to remove any contaminants. Allow the boards to completely dry before applying sealer.

## Mixing Ratios:

1. Thoroughly stir each component of the COMPOTOOL CTS101 Sealer separately prior to activation. Combine components and mix thoroughly.

Two Component System	Specific Gravity	by Weight
CTS101 Stage 1 Sealer Part A	1.351	5 parts or 100%
CTH901 Stage 1 Sealer Hardener Part B	1.12	1 part or 20%

*Example i.e 1kg or 2.2lb of Part A with 200gr or 7.05oz of Part B by weight*

2. After mixing Part A and Part B together thoroughly, the COMPOTOOL CTS101 Sealer may be thinned with common high quality two pack paint solvent such as Epoxy thinner. Suggested reducing by 30% for desired application and surface finish. Mix thoroughly and strain as you pour it into the spray gun.

## CTS101 Stage 1 Sealer Application:

1. Usual applications require three to four coats for best results. Additional coats may be applied to your satisfaction.
2. Prior to spraying on the COMPOTOOL CTS101 Sealer be sure to carefully inspect the mould for larger pits or blemishes. For any of these types of spots use a pencil brush and COMPOTOOL CTS101 Sealer and gently dab them to fill them prior to spraying or post spraying.
3. Apply the thinned COMPOTOOL CTS101 Sealer to the surface of the COMPOTOOL block using a gravity feed or pressure pot spray gun. We recommend a 1.3mm (0.078 inches) nozzle set up and approximately 1.5 bar pressure (22psi).
4. Hold the nozzle of the gun approximately 200mm (8 inches) from the mould surface and adjust the output to form a wet film without running or dripping (especially on vertical surfaces). Coat the entire surface of the mould over-lapping sprayed areas to ensure full coverage. Wait until the COMPOTOOL CTS101 Sealer is touch dry (approximately 15 to 20 minutes at 20° C (68°F) before applying the next coat.
5. Repeat Step 3 (typically 3 to 4 times). Some areas with small defects in the board will need more coats to ensure a flat surface.
6. After all coats are applied, allow the sealer to dry for 12 hours at 20° C (68°F) or 3 hours at 60°C (176°F) (allowing sufficient time for the board surface to reach temperature).
7. After the COMPOTOOL CTS101 Sealer has thoroughly dried lightly sand the surface with 320 or 400 grit until suitable smoothness is reached. Be careful not to distort the surface and take it out of tolerance. **DO NOT SAND THROUGH THE SEALER.** If you cannot remove the gloss without sanding through the sealer due to deep pitting use a pencil brush and COMPOTOOL CTS101 Sealer and gently dab them to fill them and then lightly sand.
8. Wipe the surface down with a clean cloth and wax and grease cleaning solvent. Wiping on with one cloth and wiping off with another to ensure no containments are left on the surface.
9. Please note if you have sanded through the COMPOTOOL CTS101 Sealer anywhere it could make demolding more difficult. Reapply COMPOTOOL CTS101 Sealer by spraying the sanded through areas and then lightly sand ensuring not to sand through. Repeat step 8 before applying the Stage 2 Sealer

### CTS202 Sealer – Wipe on Application:

1. Apply COMPOTool CTS202 Sealer with a clean, dry cloth. Fold the cloth so that a smooth, flat surface is presented to the mould surface. Change the cloth if it becomes dirty.
2. Wipe the wet cloth over mould surface covering an area of approximately 0.1 m<sup>2</sup> (1ft<sup>2</sup>). Vigorous rubbing or polishing is not required. Frequently re-wet the cloth. NOTE: the first coat may soak into the board but subsequent coats will remain visible on the surface.
3. Continue applying COMPOTool CTS202 Sealer until the entire surface is coated. Allow to dry/cure for a minimum of 10 minutes at 20° C (68°F) between coats.
4. Repeat steps 1-3 building up the coating. After 2 or 3 coats the board will start to develop a gloss finish. Ensure each coat is dry/cure before applying the following coat.
5. OPTIONAL: After 3 coats allow to dry for 20 minutes and then lightly sand (800 grade paper or higher) to remove any remaining surface roughness such as dust etc.
6. Apply 1 or 2 final coats following steps 1-3.
7. Allow sealer to cure for at least 2 hours at room temperature or 20 minutes at 60°C/140°F (allow sufficient time for the board surface to reach temperature).
8. Apply COMPOTool CTR404 Release Agent. (See COMPOTool CTS404 Release Technical Data Sheet for more details). Allow to dry for 10 minutes at 20° C (68°F) between coats.

### CTS202 Sealer – Spray on Application:

1. A gravity feed top coat spray gun will give the best drying pattern and highest gloss finish while providing optimum transfer efficiency. We recommend a 1.3mm (0.078 inches) nozzle set up and approximately 1.5 bar pressure (22psi).
2. Hold the nozzle of the gun approximately 200mm (8 inches) from the mould surface and adjust the output to form a wet film without running or dripping (especially on vertical surfaces). Coat the entire surface of the mould over-lapping sprayed areas to ensure full coverage. Allow the Sealer to dry for 10 minutes at 20° C (68°F) before applying the next coat.
3. Repeat Steps 1-2 (typically 2 or 3 coats), again allowing each to dry for 10 minutes at 20° C (68°F) between coats.
4. OPTIONAL: After 2 or 3 coats allow to dry for 20 minutes at 20° C (68°F) and then lightly sand (800 grade paper or higher) to remove any remaining surface roughness such as dust etc.
5. Apply 1 or 2 final coats following steps 1-3.
6. Allow sealer to cure for at least 2 hours at room temperature or 20 minutes at 60°C/140°F (allow sufficient time for the board surface to reach temperature).
7. Apply COMPOTool Release Agent. (See COMPOTool Release Technical Data Sheet for more details).

### Supply:

COMPOTOOL CTS101 Stage 1 Sealer Part A	4L (1US Gallon) Containers
COMPOTOOL CTS101 Stage 1 Sealer Part Hardener Part B	1L ( 1US Quarts) Containers
COMPOTOOL CTS202 Stage 2 Sealer	1L (1 US Quart) Containers

### Notes:

1. Application of COMPOTOOL products should be performed in a well-ventilated area. The COMPOTOOL board must be clean and dry before use.
2. COMPOTOOL CTS101 Sealer is sensitive to variations in application technique and thickness. It is important that the user carries out their own test and trials to determine how many coats are required for desired surface finish and application technique. Mould configuration, room temperature and humidity will influence the cure time from that detailed above.
3. COMPOTOOL CTS101 Sealer must be used in conjunction with CTS202 Sealer and CTS404 Release to seal the micro-pores and give a good release.

### Health and Safety:

**FOR INDUSTRIAL OR PROFESSIONAL USE ONLY.**

**DO NOT HANDLE UNTIL PRECAUTIONS ON THE SAFETY DATA SHEET HAS BEEN CAREFULLY READ AND UNDERSTOOD.**

**FOR ADDITIONAL ENVIROMENTAL, HEALTH AND SAFTY INFORMATION REFER TO SAFETY DATA SHEET.**

**BY ACCEPTING THE GOODS SUPPLIED BY COMPOTOOL SELLER AND BUYER AGREE TO THE FOLLOWING LIMITED WARRANTY AND REMEDIES LIMITATIONS:**

COMPOTOOL warrants that goods sold will be merchantable. If goods are defective, Buyer may return them at Buyer's cost to COMPOTOOL within 12 months of purchase for a full refund of the purchase price. Other than this limited warranty, there are no express or implied warranties. There is no warranty as to fitness for a particular use. COMPOTOOL recommends that The Buyer shall take all recommended safety precautions while working with the goods. COMPOTOOL and Buyer agree that other than return of the purchase price COMPOTOOL will not be liable for any damages, consequential damages or incidental damages. When handling this product prolonged skin contact may lead to skin irritation and airborne dust can be released. It is recommended that suitable gloves, respiratory and eye protection equipment are used when handling. When sanding and machining use appropriate dust extraction and work in a well-ventilated area.

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