

COMPOTOOL CTA505 Adhesive Technical Datasheet

COMPOTOOL CTA505 Adhesive is a two component high temperature thermally stable adhesive that bonds the Compotool High Performance Tooling Boards.



Key Features:

- High temperature resistance
- Matched hardness
- Low odour
- Non-contaminating

Technical Information:

Properties	CTA505 Adhesive Part A	CTH905 Adhesive Hardener Part B
Appearance		Creamy Off-white liquid
Odour		Faint
Estimated Coverage Mixed		2L / 4kg per 1m ² (2 US Quarts per 10 ft ²)
Bond Joint Thickness		Between 0.5mm and 3mm (.020" and .125")
Shelf Life		12 months
Maximum Use Temperature		250°C (480°F)

Storage:

- Keep sealed when not in use. Previously opened cans have a reduced shelf life
- Keep away from sources of ignition
- Store in a cool dry place and protected from frost

Board Preparation:

1. For high strength structural bonds pre-fit Compotool blocks to insure the tightest bond joints and eliminate uneven gaps.
2. The surface of the COMPOTOOL board should be clean, dry and dust free. With a dry, oil-free air line dust off the surface. (At no other time during the COMPOTOOL process do we advise the use of an air-line).
3. Densify the surface with 10 generous coats of COMPOTOOL CTD003 Densifier. COMPOTOOL CTA505 Adhesive can be applied to wet coats of COMPOTOOL CTD003 Densifier. No sanding is required between COMPOTOOL CTD003 Densifier and the application of COMPOTOOL CTA505 Adhesive.

Mixing Ratios:

IMPORTANT! Prior to mixing the two components be sure to thoroughly stir the CTH905 as contents may have settled in storage

CTA505 Adhesive Mixing Ratios	Specific Gravity	Parts by Weight
CTA505 Adhesive – Part A	1.86	100%
CTH905 Adhesive Hardener – Part B	2.34	100%

Example i.e 1kg or 2.2lb of Part A with 1kg or 2.2lb of Part B by weight

Thoroughly blend the two parts until completely mixed. The work life of 100oz of mixed material at (73°F) 23°C is approximately 2 hours. Smaller masses and or higher temperatures will shorten work life.

CTA505 Adhesive – Trowel on Application:

1. For large shapes Compotool recommends the use of a base plate to block up on. Apply a layer of COMPOTOOL PTFE ToolFace between the base plate and the Compotool blocks. The use of unattached locator blocks are recommended. Do not glue or bolt the block up to the base plate due to differential thermal expansion between the base plate and the block up.
2. With a trowel or brush, generously apply the thoroughly mixed CTA505 Adhesive to both sides of the board. Bond joint thickness of between 0.5 and 3mm (.020” and .125”).
3. Join the boards and secure until adhesive sets. Boards can be secured via clamps or vacuum bag. Setting time is approximately 24 hours at room temperature.
4. Prior to machining, post cure the block up at 180°C (350°F) for 1 hour. Allow enough time for the block up to come up to temperature. This may take several hours.

Supply:

Compotool CTA505 is sold in pack of both Part A and Part B together.

COMPOTOOL CTA505 Adhesive Part A	5L (1.3 US Gallons) 9kg / 19.8lb Containers
COMPOTOOL CTH905 Adhesive Part B	4L (1 US Gallons) 9kg / 19.8lb 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. The COMPOTOOL CTA505 Adhesive 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 thick they can apply the adhesive. Mould configuration, room temperature and humidity will influence the cure time from that detailed above.

Health and Safety:

FOR INDUSTRIAL OR PROFESSIONAL USE ONLY.

DO NOT HANDLE UNTIL PRECAUTIONS ON THE SAFETY DATASHEET HAS BEEN CAREFULLY READ AND UNDERSTOOD.

FOR ADDITIONAL ENVIRONMENTAL, HEALTH AND SAFETY INFORMATION REFER TO SAFETY DATASHEET.

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.

All information contained in this datasheet is given in good faith and based on tests believed to be reliable. COMPOTOOL Ltd. makes no warranty of fitness for a particular use. It is the responsibility of the user to determine the suitability of the products for their intended use and to assume all risk and liability in connection with their use. This information will be periodically reviewed and may be subject to modification.