



CONTACT ADHESIVE • CODE HM105NF

# Taftbond HM105NF

Contact Adhesive

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## PROPERTIES

Taftbond HM105NF is the non-flammable version of the HM105 GPC contact adhesive, commonly used in tunnel boring projects for bonding EPDM gaskets to concrete segments. Besides its high bonding strength with a wide variety of substrates (concretes, timbers, metals, rubbers, laminates and more), it is ideal for applications on worksites that are potentially exposed to welding sparks, significantly reducing fire hazards. Taftbond HM105NF is also specially formulated to maintain a smooth flow without gelling up as quickly as normal contact adhesives. This eliminates uneven lumpiness, providing fast and consistent quality.

## FEATURES

- Non-flammable
- Stable storage
- High bonding strength with a wide variety of substrates
- Fast tack-free and adhesion build-up

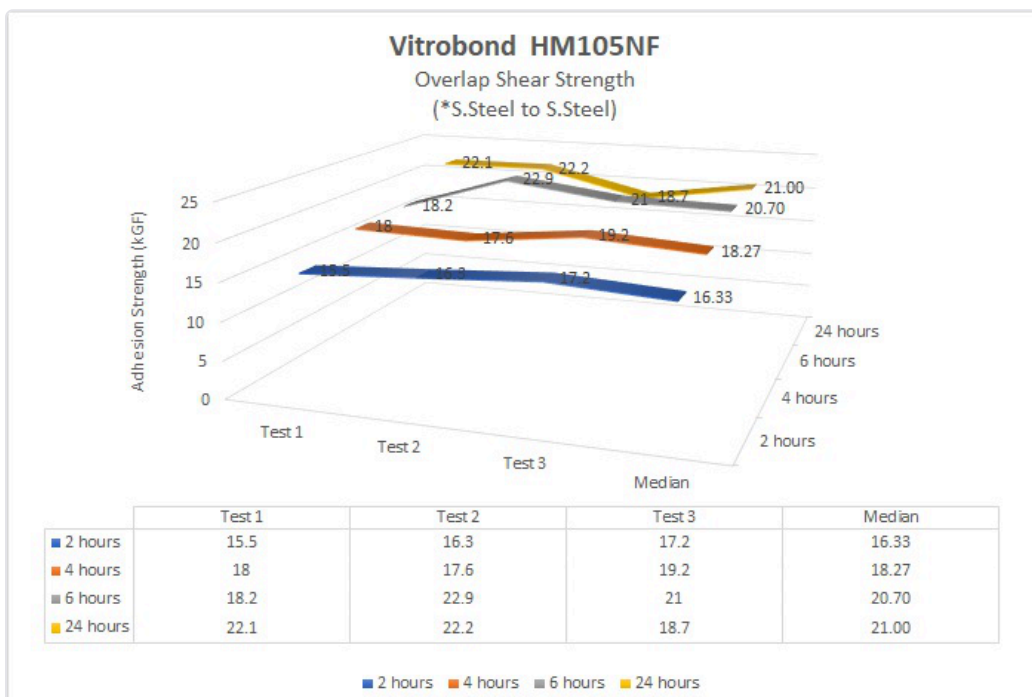
## TYPICAL PROPERTIES

PROPERTIES	SPECIFICATION
Colour	Yellowish viscous liquid
Viscosity (Brookfield, Spindle 2 at 20 rpm, 25°C)	4500 ± 50 cps
Density (gm/ml)	1.5 ± 0.5
Flash Point (ASTM D3828-18a, 2021)	50°C
Tack-Free Time (30°C)	Approx. 10 - 15 minutes
Net Weight	5.5 kg per tin
Shelf Life	12 months from date of manufacturing
Storage Condition	Store in cool places away from direct sunlight

## ADHESION PERFORMANCE (OVERLAP SHEAR, STAINLESS STEEL TO STAINLESS STEEL)

CURE TIME	MEDIAN BOND STRENGTH
2 hours	16.33 kGF
4 hours	18.27 kGF
6 hours	20.70 kGF
24 hours	21.00 kGF

## OVERLAP SHEAR STRENGTH CHART



Reproduced from the source TDS. Median bond strength rises from 16.33 kGF at 2 hours to 21.00 kGF at 24 hours.

## HANDLING AND APPLICATION

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<b>Surface preparation</b>	Best results are achieved on clean, dry surfaces. Oil, grease and other contaminants can be removed by wiping with IPA, acetone or MEK. Refer to the method statement prior to commencement of the bonding application.
<b>Application</b>	Apply adhesive to both surfaces. Bond immediately as soon as the surfaces are tack-free, within 5 to 10 minutes (depending on ambient temperature).
<b>Dwelling time</b>	For large surface panel laminating, once bonded, apply even pressure from the inside out, making sure to avoid any air entrapment.
<b>Curing time</b>	The bonding strength increases over time. 80% of ultimate strength is reached in approx. 2 hours, 90% within 4 hours, and full cure after 6 hours (depending on ambient conditions).
<b>Product appearance</b>	Colour and viscosity may vary between batches, but the performance and integrity of bonded parts will not be compromised in any way.

## INDUSTRY APPLICATIONS

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- Tunnelling and civil infrastructure: bonding EPDM gaskets to precast concrete tunnel segments in tunnel boring machine (TBM) projects
- Transportation: fire-sensitive assembly areas in rail, marine and aerospace MRO environments
- General manufacturing: hot-work zones, welding bays, and any production environment requiring a non-flammable bonding solution

## COMPLIANCE AND QUALITY

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Made under the ISO 9001 quality management system of Vitrochem Technology. RoHS declarations and Safety Data Sheets are available on request.

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Data last reviewed **June 2026**.

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