



PRODUCT SPECIFICATION

TURBO MASTER LOK KOAAA \(\Sigma TII\subsetem H\Sigma \text{GEL}\)

General Purpose - Gap Filling

1. PRODUCT DESCRIPTION

TURBO MASTER LOK ΚΟΛΛΑ ΣΤΙΓΜΗΣ GEL is a general industrial grade cyanoacrylate adhesive. It has been specially formulated to achieve the strongest possible bond between rough or irregular surfaces, on most metals, plastics or rubbers. TURBO MASTER LOK KOAAA $\Sigma TI\Gamma MH\Sigma$ GEL is a one-component, solvent-free system and does not require the use of a catalyst, heat or clamps. When a thin layer applied between two surfaces comes into contact with atmospheric moisture, a rapid polymerization occurs producing the ultimate bond.

2. TYPICAL PROPERTIES OF UNCURED MATERIAL

Base	Ethyl Cyanoacrylate	
Color	Transparent, colorless to yellowish colored liquid	
Specific Gravity @ 25°C	1.05	
Refractive Index (n D 20)	1.439	
Flash Point	See MSDS	
Vapor Pressure (hPa)	<1	
Viscosity (cP) @ 25°C 1000 – 1500		
Shelf Life	12 months	
Storage Life Below 5°C	12-18 months	

3. CURING PERFORMANCE

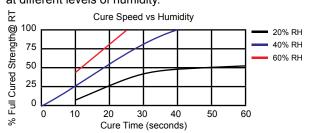
There are many factors that can influence the rate of cure. These include: the types of substrate used, the condition of the surface to be bonded, the smoothness of the surface, the closeness of the surfaces, the atmospheric conditions etc.

Cure Speed / Substrate

Steel to Steel	20 - 50 seconds
Stainless Steel	30 - 90 seconds
Aluminum	10 – 30 seconds
Zinc plated	40 - 90 seconds
ABS to ABS	15 – 40 seconds
ABS to NBR	5 – 15 seconds
ABS to Wood	5 – 10 seconds
NBR to NBR	5 – 10 seconds
Polycarbonate	20 - 60 seconds

Cure Speed / Humidity

The following graph shows the tensile strength developed at different levels of humidity.



Cure Speed / Bond Gap

The rate of cure depends on the bond-gap. A smaller bond-gap results in faster cure speeds.

4. TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties	
Coefficient of Thermal Expansion (K-1)	100 x 10 ⁻⁶
Coefficient of Thermal Conductivity (W/m.K)	0.10
Working temperature	-55°C - 80°C
Electrical Properties	
Volume Resistivity (Ω.cm)	1 x 10 ¹⁶
Surface Resistivity (Ω)	1 x 10 ¹⁶
Dielectric Constant @ 10 kHz	2.30
Dielectric Dissipation Factor @ 10 kHz	<0.02
Dielectric Breakdown Strength (kV/mm)	25

TDS TURBO MASTER LOK ΚΟΛΛΑ ΣΤΙΓΜΗΣ GEL

Revision date: 08/2018 - Revision: 02



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ΚΟΛΛΑ ΣΤΙΓΜΗΣ **GEL**

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5. ADHESIVE PERFORMANCE

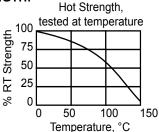
After 24 hours at 25°C.

Tensile Strength

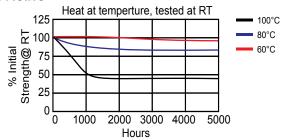
Steel 190 - 210 Kg/ cm2 250 - 450 Kg/ cm2 Stainless Steel 170 - 190 Kg/ cm2 Aluminum 150 - 170 Kg/ cm2 Copper **PVC** 40 - 60 Kg/ cm2 50 - 70 Kg/ cm2 **ABS** 80 - 120 Kg/ cm2 Polycarbonate Polystyrene 30 - 45 Kg/ cm2**NBR** 5 - 9 Kg/ cm 2SBR 5 - 10 Kg/ cm2

TYPICAL ENVIRONMENTAL RESISTANCE

HEAT STRENGTH:



HOT AGING



6. DIRECTIONS FOR USE

Make sure the surfaces to be bonded are clean and dry (preferable to solvent-wipe plastics, glass, and rubber, and to acid-treat metals).

Dispense a drop or drops to one surface only. Apply only enough to leave a thin film after compression.

Press parts together and hold firmly for a few seconds. Good contact is essential. An adequate bond develops in less than one minute. (Maximum strength is achieved in 24 to 48 hours).

Wipe off excess adhesive from the top of the container and recap TURBO MASTER LOK KOAAA \(\Sigma \text{TI} \Gamma H \Sigma \text{GEL}\) if left uncapped, may deteriorate by contamination from moisture in the air.

Because TURBO MASTER LOK KOAAA Σ TIFMH Σ GEL polymerises on contact with moisture surfaces, sometimes whitening will occur on the surface of the container or the bonded materials. Should this happen, wipe surfaces well with debonder.

7. HANDLING AND STORAGE

Storage: Keep products in the unopened container in a cool and dry location. Best when stored at 2 to 8°C. Temperatures less than 2°C can adversely affect product properties. Do Not Freeze. Keep container tightly closed until ready for use

Handling: Material removed from containers may be contaminated during use. Do not pour back any product to the original container. Misuse of product will void all warranties.

8. PRECAUTIONS

Use with proper ventilation. Avoid contact with skin and eyes.

If contact with skin occurs, rinse with warm water or dissolve gradually with appropriate debonder. Do not try to remove forcibly.

If adhesive gets into eye, keep eye open and rinse thoroughly. Seek medical attention immediately. Keep well out of reach of children.

Keep adhesive in a cool, dry place 20-25°C (68-77°F). For long-term storage, refrigeration (2°C or 35°F) is recommended.

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