NITRO 804

Instant Cyanoacrylate Adhesive

Product Description

NITRO 804 is a high strength, top fast setting adhesive which can be used for virtually any type of fastening job NITRO 804 has become one unique product featuring with the fastest setting ability in the realm of Cyanoacrylate Adhesive. NITRO 804 is especially designed for bonding and repairing. Better efficiency and quality combined with cost saving have made NITRO 804 to be a substitute for repair material. When a thin layer of NITRO 804 applied between two surfaces comes into contact with atmospheric moisture, a rapid polymerization occurs producing the ultimate bond.

Typical Properties of Uncured Material

Base	Ethyl Cyanoacrylate
Color	Transparent, colorless to yellowish colored liquid
Specific Gravity @ 25°C	1.1
Refractive Index (n D 20)	1.439
Flash Point	See MSDS
Vapor Pressure (hPa)	< 1
Viscosity (cP), 25℃	1.8 – 5
Shelf life	9 months

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

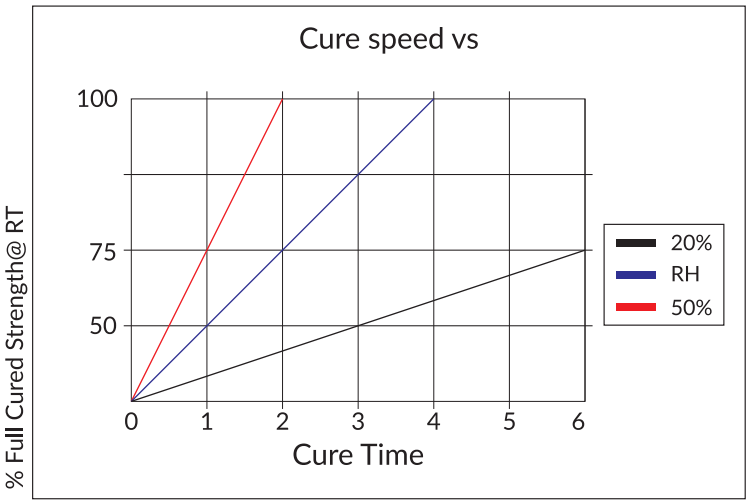
Steel to Steel	5 – 10 seconds
Stainless Steel	3 – 5 seconds
Aluminum	5 – 15 seconds
Zinc plated	20 – 40 seconds
ABS to ABS	3 – 5 seconds
ABS to NBR	2 – 5 seconds
ABS to Wood	5 – 10 seconds
NBR to NBR	2 – 5 seconds
Wood	20 – 30 seconds
Polycarbonate	10 – 40 seconds

NITRO 804

Instant Cyanoacrylate Adhesive

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 the cure speed.

Typical Properties of Cured Material

Physical Properties	
Color	Clear
Coefficient of Thermal Expansion (K-1)	100 X 10-6
Coefficient of Thermal Conductivity (W/m. K)	0.10
Softening Point	165°C
Electrical Properties	
Volume Resistivity (Ω.cm)	2 – 10 x 1015
Surface Resistivity (Ω)	10 to 80 x 1015
Dielectric Constant @ 10 kHz	2.5
Dielectric Dissipation Factor @ 10 kHz	<0.02
Dielectric Breakdown Strength (kV/mm)	25

Adhesive Performance

After 24 hours at 25°C.

Tensile Strength	
Steel	150 – 210 Kg/ cm^2
Stainless Steel	150 – 250 Kg/ cm^2
Aluminum	140 – 170 Kg/ cm^2

Copper	130 – 150 Kg/ cm^2
PVC	40 – 60 Kg/ cm^2
ABS	50 – 70 Kg/ cm^2
Polycarbonate	80 – 120 Kg/ cm^2
Polystyrene	30 – 45 Kg/ cm^2
NBR	5 – 9 Kg/ cm^2
SBR	5 – 10 Kg/ cm^2

Directions for Use

1. Make sure the surfaces to be bonded are clean and dry (preferable to solvent-wipe plastics, glass, and rubber, and to acid-treat metals).
2. Dispense a drop or drops to one surface only. Apply only enough to leave a thin film after compression.
3. 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).
4. Wipe off excess adhesive from the top of the container and recap NITRO 804 if left uncapped, may deteriorate by contamination from moisture in the air.
5. Because NITRO 804 condenses by polymerization, sometimes whitening will occur on the surface of the container or the bonded materials. Should this happen, wipe surfaces well with acetone.

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

Handling: 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

Precautions

1. Use with proper ventilation. Avoid contact with skin and eyes.
2. If contact with skin occurs, rinse with warm water or dissolve gradually with solvent such as acetone, or nitromethane. Do not try to remove forcibly.
3. If adhesive gets into eye, keep eye open and rinse thoroughly. Seek medical attention immediately.
4. Keep well out of reach of children.
5. 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.

NITRO 804

Instant Cyanoacrylate Adhesive

Safety Health and Environmental Information

During Application

- Always work in well ventilated area. Wear appropriate attire, especially gloves and eye protection, mask. Avoid contact with skin as it may cause irritation.

Cleaning

- Wash all tools with clean water immediately after application.

Safety Instructions

- In case of eye contact rinse immediately with water and seek immediate medical treatment. To remove
- liquid solution from skin, use soap and water or appropriate cleanser. In the event of spillage, contain and collect split liquid Polymer by using sand or earth.

Storage

- Store liquid in dry and well-ventilated place away from heat sources, flammables or direct sun light. Keep Bag tightly closed in secure, upright position. Do not store near food, drinks or animal feed. Keep out of reach of children. Do not dispose unwanted used liquid into drains, water sources or open sewers. To dispose safely, pour unwanted liquid onto old newspaper or thick paper and let it dry before placing in a proper waste receptacle.

Environment

- Does not contain any added lead, mercury or chromium compounds.
- Lead content does not exceed 90 parts per million.

Disposal Information:

- Disposal of any polymer waste & containers in accordance with applicable Environment (Protection) Act 1986 under the Hazardous Wastes (Management & Handling) rules 1989.
- Safety datasheets will be made available to professional users upon request.

NIPPON PAINT (INDIA) PRIVATE LIMITED
129, 140, 9th Floor, Prestige Palladium Bayan Building, Greams Road, Thousand Lights, Chennai- 600006, Tamil Nadu, India
Toll-Free: 1800 425 3636
www.nipponpaint.co.in