



2241-05

2241-05 is a black, medium viscosity, rubber- toughened ethyl cyanoacrylate adhesive. It provides superior shock and thermal resistance when bonding rubbers, metals, and plastics in harsh environments, and displays excellent strength and flexibility on a variety of substrates. 2241-05 is certified to ISO 10993-5 for biocompatibility, making it appropriate for use in medical applications.

Technology / Base	Ethyl
Type of Product	Cyanoacrylate
Components	One Component
Curing	Humidity
Appearance / Color	Black
Consistency	Liquid

Technical Data

Rheology	Value	Condition/Method
Viscosity	500 +/- 100 cPs	
Density		
Specific Gravity	1.06	
Uncured Material Characteristics		
Flash Point	85°C (185°F)	
Set Time	Steel 25 - 60 sec	
	ABS 25 - 50 sec	
	EPDM 20 - 40 sec	
Shelf Life	9 mo	
Cured Material Characteristics		
Full Cure Time	24 hours	
Cure Appearance	Black	
Service Temperature	-55 to 140°C	
RoHS Compliant	yes	
Cured Mechanical Properties	See Graphs and Table Below	

General Instructions

Surfaces to be bonded should be clean and dry. Dispense a drop or drops to one surface only. Apply only enough to leave a thin film layer after compression. Press parts together and hold firmly for a few seconds. Good contact is essential. An adequate bond develops in less that one minute and maximum strength is attained in 24 hours. Wipe off excess adhesive from the top of the container and recap. products if left uncapped may deteriorate by contamination from moisture in the air. Because products cure by polymerization, whitening may appear on the surface of the container or the bonded materials. This will not affect adhesive performance.

Curing Performance

Ambient surface moisture initiates the curing process. Handling strength is reached in a short time, and will vary based on environmental conditions, bond line gap, and other factors. Product will continue to cure for at least 24 hours before full strength and solvent resistance is developed.

Storage

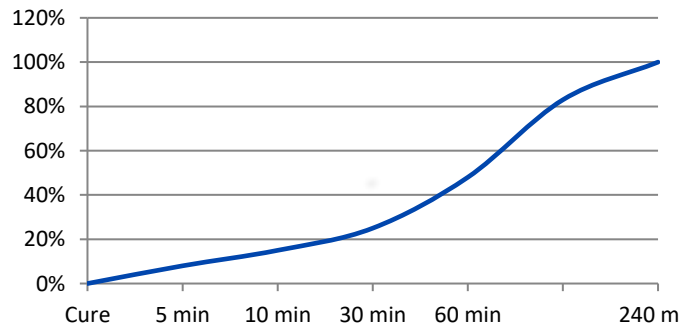
Containers should be stored in a cool, dry, dark area. Storage temperature 15.5°C - 25°C (60°F - 77°F), without exposure to direct light or heat. Do not refrigerate.

Specifications and Approvals

10993-5

A-A-3097, Type II Class 3

Time Until Full Cure (% of RT strength)

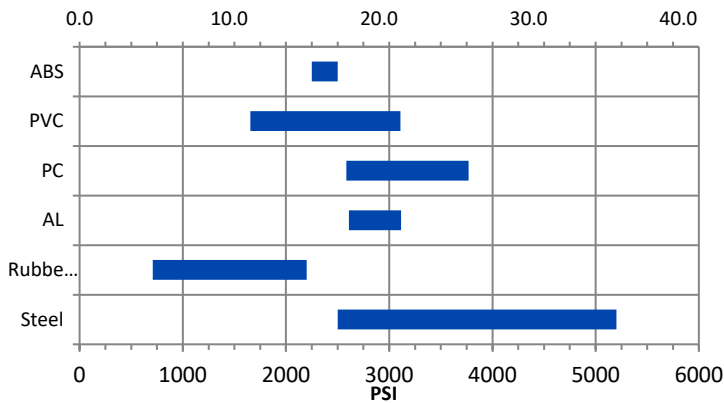


Safety & Disposal

For safe handling information and disposal instructions on this product, consult the Safety Data Sheet (SDS)



Performance Range by Substrate (N/mm²)



Performance of Cured Adhesive

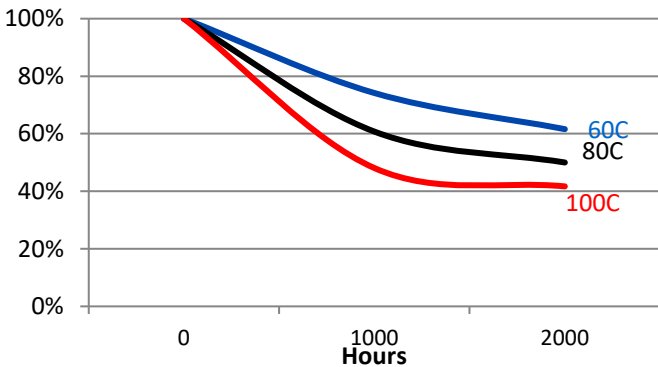
Substrate	N/mm ²		PSI	
Steel	17.2	to 35.9	2500	to 5200
Rubber*	4.9	to 15.2	710	to 2200
AL	18.0	to 21.5	2610	to 3115
PC**	17.8	to 26.0	2585	to 3770
PVC**	11.4	to 21.4	1655	to 3110
ABS**	15.5	to 17.2	2250	to 2500

*Rubber figures given are typical. Your results may vary by specific rubber type.

**Tested to ASTM 4501

***n/r = not recommended

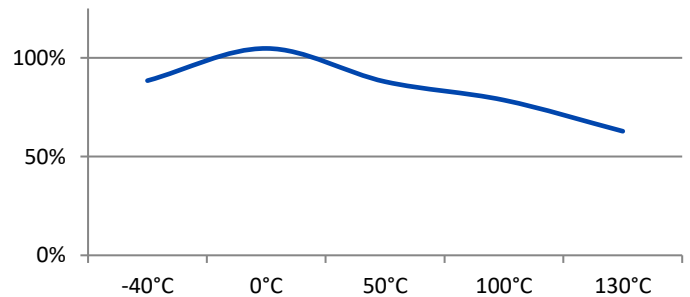
Heat Aging (aged at temp indicated and tested @ 22°C)



Solvent Resistance

Solvent	Example	Resistance
Alcohol	Ethanol, Methanol	+++
Ester (aromatic)	Ethylacetate	+++
Ketone (aromatic)	Acetone, Benzophenone	---
Aliphatic hydrocarbon (alkanes)	Petrol, Heptanes, Hexane	++-
Aromatic hydrocarbons	Benzyl, Toluol, Xylol	++-
Halogenated hydrocarbons	Methylenchloride, Chloroform, Chlorobenzol	---
Weak aqueous	Nitrite, muriatic acid, sulphuric acid, phosphoric acid	+++ (--- if concentrated)
Weak aqueous base	sodium hydroxide solution, caustic potash	+++ (--- if concentrated)

Hot Strength (%RT strength, tested at temperature)



Date Modified: 13 March 2017

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