ORAPI
ENGINEERED SOLUTIONS WORLDWIDE

TECHNICAL DATA SHEET

TDS 355/Index 03 – 30/10/2015

355

C 2040

INSTANT ADHESIVE

RUBBER AND O-RINGS
APPROVED FOOD-SAFE NSF P1 – No. 140139

DEFINITION

Very rapid bonding cyanoacrylate glue for all materials. It is excellent for gluing rubber and plastics.

ADVANTAGES

High-performance gluing.
Instant adherence.
Easy-to-use.
Clean gluing.
Significant resistance to wrenching.
Economical: 1 20g bottle can glue up to 4,000 times. 1 drop = 1 cm², approx.
Approved for use in food environments.

APPLICATION FIELDS

O-rings, window joints, electrical appliances, rubber stoppers, mechanical uses, electronic uses, optical uses, jewellery, watchmaking, plastics processing, domestic appliances, knick-knacks, dishes. All materials except Teflon, polyethylene and their derivatives.
Also glues glass, metals and many other materials.
PVC pipes.
Food-related industries.

TECHNICAL CHARACTERISTICS

Colour ..... transparent
Density 1.05
Viscosity ..... 20-40 cP
Flash point ..... >85°C
Operating temperature ..... -60 to +100°C
Setting time:

- Plastics, glass, rubber ..... 2 to 5 seconds
- Metals, wood ..... 20 to 40 seconds
- Tensile strength, SBR/SBR ..... 200 daN/cm² (ASTM D 2095)
- Tensile strength EPDM/EPDM ..... 24 daN/cm² (ASTM D 2095)
- Resistance to shearing strength, aluminium/aluminium 27.5 MPa
- Resistance to shocks ..... 15 daN/cm² (ASTM 950)

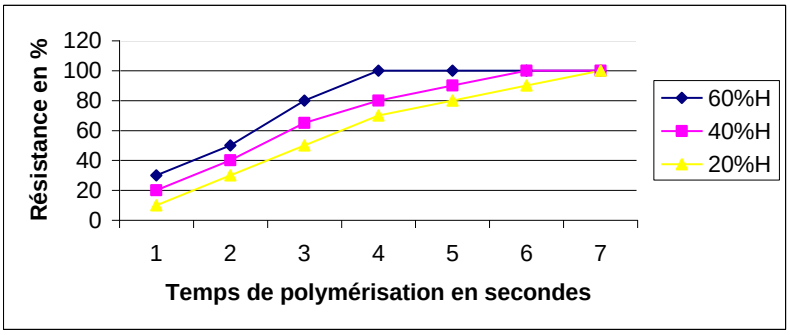
Manufacturing site and registered office
Parc Industriel de la Plaine de l'Ain - 225 allée des Cèdres - 01150 Saint-Vulbas - FRANCE
Tél. +33 (0)4 74 40 20 25 - Fax +33 (0)4 74 40 20 26 - www.orapi-maintenance.com

SETTING TIME

Setting time depends on the materials, their surface conditions, the backlash between the parts, and relative humidity.
Tests performed at 20°C and 50% relative humidity.
The times given are the times after which shearing strength is 0.1 N/mm² (14.5 psi) according to the ASTM D1002 standard.
Comments: Maximum resistance (mechanical and chemical) is obtained after 24 hours of polymerisation.
The less the backlash, the faster the adhesion.

ABS	5 to 10 seconds
PVC	5 to 10 seconds
Glass	5 to 15 seconds
Rubber	<5 seconds
Neoprene	<10 seconds
Steel	5 to 15 seconds
Aluminium	5 to 15 seconds
Treated surfaces	5 to 30 seconds
Wood	90 to 120 seconds
Balsa wood	5 to 15 seconds
Leather	5 to 30 seconds
Fabric	5 to 30 seconds
Polycarbonate	5 to 40 seconds
Paper	5 to 60 seconds

POLYMERISATION SPEED BASED ON RELATIVE HUMIDITY



PHYSICAL PROPERTIES OF THE POLYMERISED PRODUCT

Linear expansion coefficient, ASTM D696	80.10^{-6} K^{-1}
Thermal conductivity coefficient, ASTM C177	0.1 $W.m^{-1}.K^{-1}$
Glass transition temperature, ASTM E228	120°C

ELECTRICAL PROPERTIES OF THE POLYMERISED PRODUCT

Volume Resistivity, ASTMD257	1.10^{16} Ω.cm
Surface resistivity, ASTM C177	$1. 10^{16}$ Ω.cm
Dielectric strength, ASTM D149	25 Kv/mm
Dielectric constant and loss at 25°C, ASTM D150	C=2.75 and P<0.02 for 0.1, 1 and 10 kHz

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MECHANICAL PERFORMANCE AFTER 24 hours

Resistance to shearing strength, ASTM D1002, DIN 5328

Blasted steel	26 N/mm (3800 psi)
Aluminium without oxide	19 N/mm (2800 psi)
Zinc dichromate	10 N/mm (1500 psi)
ABS	20 N/mm (3000 psi)
PVC	20 N/mm (3000 psi)
Polycarbonate	20 N/mm (3000 psi)
Phenolic material	15 N/mm (2200 psi)
Neoprene rubber	15 N/mm (2200 psi)
Nitrile rubber	15 N/mm (2200 psi)

Tensile strength, ASTM D2095, DIN 5328

Blasted steel	25 N/mm (3600 psi)
Buna N rubber	15 N/mm (2200 psi)

RESISTANCE TO CHEMICAL PRODUCTS, measured after returning to 22°C.

Motor oil at 40°C (1000 hours)	95% of initial resistance
Leaded petrol at 22°C (1000 hours)	100% of initial resistance
Ethanol at 22°C (1000 hours)	100% of initial resistance
Isopropanol at 22°C (1000 hours)	100% of initial resistance
Air with 95% RH at 40°C (1000 hours)	40% of initial resistance
Freon TA at 22°C (1000 hours)	100% of initial resistance

Do not allow to come into contact with oxygen.

RESISTANCE TO HEAT AGING

Aging at the temperature indicated, measured after return to room temperature,

INSTRUCTIONS FOR USE

Ready to use. For optimal polymerisation (or ideal gluing), the humidity in the air must be less than 50% in the area where it is used, and the assembled parts must be clean and dry.
016 - ORAPI NETTOYANT 3141 was specially designed for cleaning surfaces before gluing.
To reduce setting time when relative humidity is low or when there is significant backlash between the parts, use **ACTIVATEUR 6140**. This can, however, cause a decrease in mechanical resistance.
To improve mechanical resistance on certain surfaces, use **PRIMAIRE 3440**.
To disconnect assembled parts or clean the materials removed, use **DECOLLEUR 3720**.

PACKAGING

5 g bottle	Ref. 1355 F1	x 12
20 g bottle	Ref. 1355 F2	x 6
50 g bottle	Ref. 1355 F3	x 6

The data contained in this document is based on average values from testing that is updated periodically.

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