

Revised
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TECHNICAL DATA SHEETS

TORQUE 20RC

Description:

TORQUE 20RC is a high strength anaerobic adhesive for locking and sealing thread connections. Highly resistant to heat, corrosion, vibrations, water, gases, oils, hydrocarbons and many chemicals. DIN-DVGW approved for gas thread connections according to EN 751-1 (approval DIN- DVGW NR. NG-5146AR0573. Approved for potable water (KTR-DVGW). Maintains unaffected curing properties up to 200 °C on any metal surface.

PROPERTIES OF UNCURED PRODUCT (typical value)

Composition	Methacrylate Ester
Appearance	Green liquid
Specific Gravity (77°F/25°C g/ml)	1.1
Viscosity, Brookfield RVT(77°F/25°C mPa.s)	2500 to 4000 mPa.s
Spindle 4- 2,5 rpm	>100°C
Flash Point, TCC	1 year
Shelf life at 20°C	8° - 28°C
Storage temperature	

PROPERTIES OF CURED PRODUCT (typical value)

Functional strength at 24 hrs 20° on steel

Shear Strength(ISO 10123)	17 to 37 N.m
Shear Strength (DIN 54452)	20 to 35 N.m
Coefficient of thermal expansion (ASTM D696)	80 X 10 ⁻⁶ 1/K
Thermal conductivity(ASTM C177)	0.1 W/Mk
Specific heat	0.3 Kj.Kg ⁻¹ K ⁻¹
Temperature range	-55° +150°C

ENVIRONMENTAL RESISTANCE

Hot strength at temperature

Test.Temp. °C	% retained strength
50°	110%
100°	110%
150°	105%
200°	85%

Heat aging

Samples aged 3000 hours at indicated temperature and tested at room temperature.

Test temp. °C	% retained strength
180°	140%
150°	170%

Chemical / Solvent Resistance

Specimens immersed for 1000 hrs at indicated temperature and tested at room temperature.

	Test Temp. ° C	% retained
strength		
50/50 Water / Glycol	87	80
Unleaded Petrol	22	95
Motor Oil	125	100
Brake Fluid	22	100
Acetone	22	95



TECHINCAL DATA SHEETS

TORQUE 20RC



CURE SPEED VS. SUBSTRATE

% Full strength	Steel	Aluminium
25	2 hrs	8 hrs
50	2hrs and 30min	
100	15-72 hrs	

CURE SPEED VS. JOINT GAP

% Full strength	Gap 0,05mm	Gap 0,30mm
25	2 hrs	13 hrs
50	2hrs and 30min	20 hrs
100	15-72 hrs	72 hrs

CURE SPEED VS. TEMPERATURE

% Full strength	Temperature	
	5°C	40°C
25	28 hrs	25 min
50		40 min
100		15-72 hrs

DIRECTIONS FOR USE

Clean and degrease parts for best results, apply product on male threads only, use enough quantity to fill joint completely. Assemble parts, avoid overtightening due to lubricating effect of product. Allow time to cure according to data sheet.

For potable water: approved for use with cold water, allow assemblies to cure 24 hrs before water contacting.

GENERAL INFORMATION

This product is not recommended for use with strong oxidizing materials.

Where aqueous washing systems are used to clean the surfaces before bonding, these aqueous washes can affect the cure and performance of the adhesive.

This product is not normally recommended for use on plastics, users must check compatibility of the product with such substrates.

Engineering Excellence

For technical information
and support call **1-800-552-0299** or visit our website at

www.instantca.com