

TECHNICAL DATA SHEET – Gasket Maker 18

Gasket Maker 18 is an anaerobic curing adhesive for the gasketing and sealing of flanges. Also replaces solid gaskets, gives flexible cured films to seal against gases, water, LPG, hydrocarbons, oils and other chemicals. Thixotropic property prevents migration of the sealant before and during curing. Gasket Maker 18 is resistant to shock and vibration and seals to temperature from -55 to +180°C.

Properties of Uncured Product:

Composition Methacrylate Ester

Appearance Red Fluorescent Liquid

Specific Gravity (77°F/25°C g/ml) 1.13

Viscosity, Brookfield (77°F/25°C mPa.s)

Spindle 2 - 5 rpm 650000 to 900,000 mPa.s

Flash Point, TCC >93°C

Shelf life at 20°C 1 year

Storage temperature 8° - 28°C

CURING PERFORMANCE

Gasket Maker 18 is designed to be used and cured at room temperature. Where a faster cured speed is desired, or where large gaps are present, applying activator to the surface will reduce the curing to a few minutes.

HEAT CURE: Heat can be used to effect or accelerate cure when surface priming operations are undesirable. Typical heat cure conditions consist of heating and maintaining bondline temperatures at 40°C. Full cure strength is achieved in one to two hours.

CURE SPEED VS. SUBSTRATE

	% Full strength	Steel/Aluminum
25	35min	35min
50	50min	3hrs
100	24-72hrs	

CURE SPEED VS. JOINT GAP

% Full strength	Gap 0,5mm
25	30min
50	1 hrs
100	6-72 hrs

CURE SPEED VS. TEMPERATURE

% Full strength	Temperature	
	5°C	40°C
25	1 hrs	20 min
50	2 hrs	25 min
100	24 -72 hrs	6-72 hrs

PROPERTIES OF CURED PRODUCT

Functional strength at 24 hrs 20° on steel:
Shear Strength (ASTM D1002) 5 to 13 N.m
Tensile Strength (DIN 53288) 4 to 14 N.m
Coefficient of thermal expansion (ASTM D696) 80×10^{-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
25°	100%
50°	85%
100°	45%
150°	30%

HEAT AGING

Samples aged 1000 hours at indicated temperature and tested at room temperature.

Test temp. °C	% retained strength
100°	250%
120°	210%
150°	130%

CHEMICAL / SOLVENT RESISTANCE

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

	Test Temp° C	% retained strength
50/50 Water/Glycol	87	90
Unleaded Gasoline	22	55
Motor Oil	125	140

Gasket Maker products are available in sizes of 50ml and 250ml tubes. Special sizes available upon request.