INTEGRATE SOLUTIONS TO MECHANICAL MANUFACTURE AND MAINTENANCE

THE ADHESIVE SOURCEBOOK
As a high-tech enterprise, TONSAN is specialized in engineering adhesives R & D, manufacturing and sales. Twenty years, with high quality products, perfect service, and a wealth of engineering experience in adhesives, TONSAN has been supporting customers in solving machinery manufacturing, assembling, and maintenance problems.

TONSAN's anaerobic sealants, silicone sealants, PU sealants, epoxy adhesive, acrylate adhesive, chlorine glue are widely used in 29 key industries, such as automobile, engineering machinery, trains and rails, new energy, electronics, medical treatment, aerospace, marine, metallurgy, petroleum, coal, electric power etc.

Through constant innovation and accumulation, TONSAN products and technologies are much closer to the customer needs. TONSAN has become the leader and professional solution supplier in engineering adhesive industry and specialized in manufacturing, assembly, maintenance areas. TONSAN is the most reliable partner to provide professional glue solutions to help customers optimize processes, improve product quality and production efficiency, reduce costs and extend equipment life.

The worldwide sales and technical service network, support every customer apply TONSAN products more conveniently.
**Silicone Sealants**

TONSAN silicone sealant highly enhances the sealing reliability by excellent oil resistance, chemical resistance, vibration resistance and aging resistance. TONSAN has developed specialized products according to the requirements of various conditions and applications.

### Properties

- Easy operating
- Excellent chemical resistance, aging resistance, high temperature resistance
- Reliable sealing
- High efficiency

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**1527W Silicone Flange Sealant**

- White color, excellent weather resistance, high strength, erosion resistance, sulfur hexafluoride resistance, and good electrical insulation. Apply to sealing of electrical equipments.
- Package size: 85ml tube
- Order number: 15270003
- Package size: 310ml cartridge
- Order number: 152705

**1527T Silicone Flange Sealant**

- Transparent, good weather resistance, short tack free time, mildew resistance, sulfur hexafluoride resistance, and good electrical insulation. Apply to sealing of electrical equipments.
- Package size: 85ml tube
- Order number: 15271005
- Package size: 310ml cartridge
- Order number: 152715

**1598 Silicone Flange Sealant**

- Blue color, medium viscosity, high strength, high elongation, good oil resistance and bonding performance. Apply to sealing joint surface of mechanical equipments.
- Package size: 100g tube
- Order number: 15960003
- Package size: 310ml cartridge
- Order number: 159605

**1596 Silicone Flange Sealant**

- Grey color, low viscosity, good resistance to lubrication oil. Apply to sealing joint surface of mechanical equipments.
- Package size: 100g tube
- Order number: 15960003
- Package size: 310ml cartridge
- Order number: 159605

**High Temperature Silicone**

- Red color. Ultra temperature resistant up to 320°C in long term and 370°C in short time. Fast curing. Apply to sealing metal, glass and other materials. Suitable for sealing and bonding under high temperature.
- Package size: 310ml cartridge
- Order number: 159205

**1598E Silicone Flange Sealant**

- Black color. Good flowability, moisture resistance, chemical resistance, and excellent bonding performance for various materials. Apply to potting of mechanical and electrical equipments.
- Package size: 100g tube
- Order number: 15987003
- Package size: 310ml cartridge
- Order number: 159876

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**1527B Microwave Oven Sealant**

- Black color and special designed for microwave ovens, low viscosity, excellent adhesion, the curing sealant is continuous and smooth. Good scrubbing and scaling resistance. Apply to sealing home appliances, and specialized for sealing microwave oven glass and cavity. Suitable for mechanical applying.
- Package size: 18kg pail
- Order number: 152785

**1593W Electronic Equipment Sealant**

- Package size: 310ml cartridge
- Order number: 15930302

**1598F Electronic Potting sealant**

- Grey color, de-alcohol type, flame-retardant level —UL-94 V0, self-leveling, non-corrosive to circuit, suitable for sealing of electric components and body case.
- Package size: 25kg pail
- Order number: 15930405

**1593T Electronic Equipment Sealant**

- Grey color, de-alcohol type, flame-retardant level —UL-94 V0, thixotropic viscosity, non-corrosive to circuit, suitable for sealing and bonding of electronic components and equipments.
- Package size: 18kg pail
- Order number: 15930505

**1530 Two-Component Electrical Special Sealant**

- Black color, two components, addition reaction volume ratio (A: B) 1:1, 100°C, 5min fast curing. FDA food grade test, long-term temperature of 300°C, excellent bonding of metal, glass and other materials, with a special agent on the surface of the powder material.
- Package size: A component 105g barrel
- Order number: 25300003A
- B component 18kg barrel
- Order number: 25300001B
- Special primer: 500ml bottle
- Order number: 25300004B

**2534 Highly Effective Sealant**

- Black color, two components, de-alcohol type, volume ratio (A: B) 2:1, fast curing at room temperature, suitable for bonding and sealing plastics, metal and other materials.
- Package size: 400ml cartridge
- Order number: 25340202
Silicone Sealants

1590 Instant Silicone Sealant
Black color. Instant Sealing, high viscosity, high elongation, excellent heat aging resistance and oil resistance. Apply to auto-dispensing assembling line, such as oil sump tank. Suitable for mechanical applying.
- Package size: 40g/cartridge
- Package size: 20g/pail

1591 Silicone Flange Sealant
Grey color. Instant sealing, medium viscosity, high strength, high elongation, excellent heat aging resistance and oil resistance. Apply to flange sealing of engine parts. Suitable for both mechanical and manual applying.
- Package size: 310ml/cartridge
- Package size: 20g/pail

1598F Silicone Flange Sealant
Grey color, medium viscosity, high elongation, fast curing, excellent oil resistance. Apply to sealing joint surface parts of deformation and with displacement under shock and vibration conditions. Suitable for both mechanical and manual applying.
- Package size: 310ml/cartridge
- Package size: 20g/pail

1598Fa Silicone Flange Sealant
Grey color, medium viscosity and extension. Good resistance to gear oil, lubrication oil and anti-freezing solution. Apply to sealing joint surface parts of automobile transmissions, axles and engines with high rigidity. Suitable for both mechanical and manual applying.
- Package size: 310ml/cartridge
- Package size: 20g/pail

Physical Properties

<table>
<thead>
<tr>
<th>Product code</th>
<th>Color</th>
<th>Specific gravity (g/cm³)</th>
<th>Test condition: temperature 23±2℃</th>
<th>After soaking in 30#engine oil 100h at 125℃</th>
<th>After soaking in 30#engine oil 100h at 125℃</th>
<th>Tensile strength (MPa)</th>
<th>Temperature range (℃)</th>
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<table>
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Consumption Estimation (Based on 1.25g/cm³ specific gravity)

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<tr>
<td>Length (m)</td>
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</table>
Anaerobic Flange Sealants

TONSAN anaerobic sealants are used for sealing of flanges with small gaps on mechanical parts, such as housing, flanges, end cap and etc. It can improve sealing reliability, overall rigidity and loading capacity by replacing gaskets. It can also be dispensed directly on gasket to enhance sealing performance.

Properties

- Single component, Solvent free, Room temperature curing
- 100% fill the flange gap
- Suitable for sealing gap less than 0.25mm
- High strength and excellent adhesion
- excellent oil resistance, chemical resistance, vibration resistance, and aging resistance
- no corrosion
- Conform to JB/T7311 -2008 Construction machinery- anaerobic adhesive, silicone and pre-applied dry film adhesive- Application technical specifications

1510 Anaerobic Flange Sealant
High temperature resistance, chemical resistance.
Rigid adhesive layer after curing. Apply for sealing rigid flanges, end caps or used as gasket coating.
Package size: 50ml/ tube Order number: 151001
Package size: 310ml/ cartridge Order number: 151003

1515 Anaerobic Flange Sealant
General Purpose. Soft adhesive layer after curing. Apply for sealing flexible or vibrate joint surfaces, such as pumps, transmission, end cap, flange and axle.
Package size: 50ml/ tube Order number: 151501
Package size: 310ml/ cartridge Order number: 151503

1518 Anaerobic Flange Sealant (Aluminum Surface)
Soft adhesive layer after curing. Especially suitable for aluminum surface or joint surface with relative displacement caused by vibration, stress or temperature variation. It can also be used as gasket coating for sealing pumps, gearbox and axle.
Package size: 50ml/ tube Order number: 151801
Package size: 310ml/ cartridge Order number: 151803

Physical Properties

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Test condition: temperature 23±2 ℃; Relative humidity 50±5%

Consumption Estimation

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<th>Package Size</th>
<th>Tube</th>
<th>Cartridge</th>
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<tr>
<td>Diameter (mm)</td>
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<td>5.0</td>
</tr>
<tr>
<td>Length (m)</td>
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<td>2.3</td>
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Axle Surface Sealing
Pivoting Support Sealing
Transmission End Sealing
1222 Thread Locker (Easy Disassembly)
Purple color. Low strength, easy disassembled thread locker. Thixotropic viscosity. Available for fastener diameters from 6mm to 20mm. Permanently locked.
Package size: 50ml/bottle Order number: 122201
Package size: 250ml/bottle Order number: 122205

1223 Thread Locker (Oil Tolerance)
Blue color. High strength, thixotropic viscosity, excellent chemical resistance, can be used on light oil surface. Available for fastener diameters from 6mm to 20mm. Permanently locked.
Package size: 50ml/bottle Order number: 124001
Package size: 250ml/bottle Order number: 124005

1240 Thread Locker (Penetrative)
Green color. Medium strength, very low viscosity, good permeability, applied for sealing and locking of pre-assembled threads up to M12. Suitable for sealing weld joint and casting cracks under 0.1mm. Permanently locked.
Package size: 50ml/bottle Order number: 129001
Package size: 250ml/bottle Order number: 129005

1260 Thread Locker (Low Temperature Curing)
Package size: 50ml/bottle Order number: 126001
Package size: 250ml/bottle Order number: 126005

1270H Thread Locker (Thermal Aging Resistance)
Green color. High strength with medium viscosity, excellent chemical resistance and good thermal aging resistance. Available for fastener diameters up to 27mm. Permanently locked.
Package size: 50ml/bottle Order number: 127001
Package size: 250ml/bottle Order number: 127005

1271 Thread Locker (Low Viscosity)
Red color. High strength, low viscosity, and good chemical resistance. Apply for fastener diameters up to 27mm. Permanently locked.
Package size: 50ml/bottle Order number: 12710200
Package size: 250ml/bottle Order number: 12710205

1272 Thread Locker (High Temperature Resistance)
Red color. High strength with thixotropic viscosity and high temperature resistance. Permanently locked.
Package size: 50ml/bottle Order number: 127201
Package size: 250ml/bottle Order number: 127205

1277 Thread Locker (High Viscosity)
Red color. High strength with high viscosity. Suitable for fastener diameters up to 36mm. Permanently locked.
Package size: 50ml/bottle Order number: 127701
Package size: 250ml/bottle Order number: 127705

1279 Thread Locker (Ultra High Strength)
Red color. Ultra high strength with thixotropic viscosity, excellent chemical resistance and good thermal aging resistance. Permanently locked.
Package size: 50ml/bottle Order number: 127901
Package size: 250ml/bottle Order number: 127905

1764 Activator
Used to shorten curing time of anaerobic adhesives, especially at low temperature, in applications with passive metals or inert surfaces, or where large gaps are involved.
Package size: 300ml/aerosol can Order number: 176421

Properties
- Single component
- Solvent free
- Room temperature curing
- 100% fill the thread gap
- Precise tightening torque
- Clamp force transformation
- Divers categories to meet different locking strength
- Conform to US Military Standard MIL-S-46163A
- Conform to JB/T7311 -2008 Construction machinery- anaerobic adhesive, silicone and pre-applied dry film adhesive- Application technical specifications

Anaerobic Thread Lockers
TONSAN Anaerobic Thread lockers are thermosetting plastics of different strength after curing, to protect thread from impact, vibration, infiltration, rusty and corrosion. Replacing spring cushion, cotter pin and other mechanical locking methods.
Anaerobic Thread Sealers

TONSAN Anaerobic Thread Sealants are used for sealing of pipelines and no leakage and rust. After curing, can resist high pressure which are good replacements of PTFE tapes.

Properties
- Single component
- Solvent free
- Room temperature curing
- 100% fill the thread gap
- no pollution for sealed chemical, non-clogging
- Anti-seizing
- Easy to assemble, disassemble and clean
- Chemical, vibration and aging resistance
- Conform to JB/T7311 -2008 Construction machinery- anaerobic adhesive, silicone and pre-applied dry film adhesive- Application technical specifications

Anaerobic Thread Sealant (Chemical Resistance)
Purple color. Medium viscosity thread sealant with fast curing and no pollution to system, no clogging on pressure elements. Can be use on slight oil surface. Apply for locking and sealing hydraulic systems, pneumatic systems and refrigeration equipment.

Package size: 50ml/bottle Order number: 154501

Anaerobic Thread Sealant (High Temperature Resistance)
White color. A paste-like, high viscosity, general-purpose sealant, self-lubricating, resistant to high temperature chemicals such as oil, gas, vapor, and water. Suitable for locks and seals tapered pipe threads and fittings. Can be used for drinking water pipe system.

Package size: 50ml/bottle Order number: 156701

Anaerobic Thread Sealant (Fast Curing)
White color. Paste-like with white color, fast curing, and self-lubrication. Suitable for locking and sealing most chemicals such as oil, gas, vapor, and water in tapered pipe threads and fittings. Can be used for drinking water pipe system.

Package size: 50ml/bottle Order number: 156712

Consumption Estimation (1,000 bolts and nuts)

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<th>M6</th>
<th>M8</th>
<th>M10</th>
<th>M12</th>
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Test conditions: temperature 23±2 ℃; Relative humidity 50±5%

Physical Properties

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<th>Product code</th>
<th>Color</th>
<th>Specific gravity (g/cm³)</th>
<th>Viscosity (cP)</th>
<th>Gap fill (mm)</th>
<th>Break torque (N·m)</th>
<th>Fully cured time (h)</th>
<th>Temperature range (°C)</th>
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1567F Anaerobic Thread Sealant (Fast Curing)
White color. Paste-like with white color, fast curing, and self-lubrication. Suitable for locking and sealing most chemicals such as oil, gas, vapor, and water in tapered pipe threads and fittings. Can be used for drinking water pipe system.

Package size: 50ml/bottle Order number: 156712
Anaerobic Retaining Compounds

TONSAN Anaerobic Retaining Compounds are developed for the assembly of all cylindrical components such as bearing, gears, shafts, keyways and rotors. They increase the load bearing characteristics of cylindrical joints, reducing assembly stress and assembly cost.

Anaerobic Thread Locking Sealant
Brown color. Medium viscosity, medium strength. Recommended for sealing the fine threads of hydraulic and pneumatic fittings. No fillers and will not foul valves or fluid filtering system. Can be used for drinking water pipe system.
Package size: 50ml/bottle Order number: 156901
Package size: 250ml/bottle Order number: 156905

Anaerobic Thread Pipe Locking Sealant
Yellow color. A paste-like, medium strength sealant with thixotropic viscosity, fast curing and chemical resistance. Recommended for locking and sealing tapered/straight pipe threads and fittings up to 3”.
Can be used for drinking water pipe system.
Package size: 50ml/tube Order number: 157701

Anaerobic Thread Pipe Locking Sealant
Brown color. Medium viscosity sealant with medium strength. Recommended for retaining bolt nuts in quickly rotating machines.
Package size: 100ml/aerosol can Order number: 176421

Oil Piping System Sealant
Red color. A Medium viscosity sealant with medium strength. Recommended for crude oil piping systems.
Erosion resistance.
Package size: 250ml/bottle Order number: 157001

Anaerobic Thread Pipe Locking Sealant
Purple color. A paste-like, medium strength sealant with thixotropic viscosity, fast curing and chemical resistance. Recommended for locking and sealing tapered/straight pipe threads and fittings up to 3”.
Can be used for drinking water pipe system.
Package size: 50ml/tube Order number: 157701

Activator
Activator exclusive for anaerobic adhesive, used to shorten the curing time of anaerobic adhesives under low temperature, in applications with passive metals or inert surfaces, or large gaps.
Package size: 300ml/aerosol can Order number: 176421

Physical Properties

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<th>Fully-cured time (h)</th>
<th>Fully-cured time (min)</th>
<th>Temperature range (℃)</th>
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<td>2.3x10⁵</td>
<td>2&quot;</td>
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<td>1570</td>
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<td>5500</td>
<td>3&quot;</td>
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<tr>
<td>1577</td>
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<td>24000/Thixotropic</td>
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<td>40 - 150</td>
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Test condition: temperature 23±2 ℃; Relative humidity 50±5%

Consumption Estimation (1,000 bolts and nuts)

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<th>Package size</th>
<th>1/8</th>
<th>1/4</th>
<th>3/8</th>
<th>1/2</th>
<th>3/4</th>
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<tbody>
<tr>
<td>Manual Dispensing</td>
<td>45ml</td>
<td>60ml</td>
<td>60ml</td>
<td>125ml</td>
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<td>440ml</td>
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<td>Auto Dispensing</td>
<td>25ml</td>
<td>45ml</td>
<td>60ml</td>
<td>86ml</td>
<td>165ml</td>
<td>371ml</td>
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</table>

Anaerobic Thread Sealants

Properties
- Single component
- No dissolvent
- Room temperature curing
- 100% fill surface gap
- Diversified categories, meet different locking requirements
- Impact, vibration, chemical and aging resistance
- Easy assembly
- Conform to JB/T7311 -2008 Construction machinery- anaerobic adhesive, silicone and pre-applied dry film adhesive- Application technical specifications
Anaerobic Retaining Compounds

1609 Retaining Compounds (Low Viscosity)
Green color. Low viscosity, high strength. Used for cylindrical assemblies less than 0.10mm radial clearance, such as gears and shafts.
- Package size: 50ml/bottle
- Order number: 160901
- Package size: 250ml/bottle
- Order number: 160905

1608 Retaining Compounds (For Large gap)
Grey color. High viscosity, high strength, used for retaining of cylindrical parts with large gap less than 0.50 mm, such as shaft sleeve, bolt and axle.
- Package size: 50ml/tube
- Order number: 166001

1603 Retaining Compounds (Oil Tolerance)
Green color. Medium viscosity, high strength and resistant to solvents. For retaining components with radial gap less than 0.25mm, such as drive pipe, gear, and rotor.
- Package size: 50ml/bottle
- Order number: 168001
- Package size: 250ml/bottle
- Order number: 168005

1620 Retaining Compounds (High Temperature Resistance)
Green color. High viscosity, high strength, temperature resistance. Especially for locking and sealing axle hole components such as valve pipe, plastic injection core retainer coat, valve barrel cylinder liner and keyway up to 230 °C.
- Package size: 50ml/bottle
- Order number: 162001
- Package size: 250ml/bottle
- Order number: 162005

1648 Retaining Compounds
Green color. Medium viscosity, high strength, fast curing, mainly used for locking and sealing axle hole components, especially for continuous work condition under temperature up to 175 °C.
- Package size: 50ml/bottle
- Order number: 164801
- Package size: 250ml/bottle
- Order number: 164805

1662 Cup Plug Sealant
Red color. A thixotropic, high-strength sealant. Designed for sealing and securing cylindrical metal assemblies such as engine block up and cup plugs.
- Package size: 1kg/bottle
- Order number: 166205

1764 Activator
Activator exclusive for anaerobic adhesive, used to shorten the curing time of anaerobic adhesives under low temperature, in applications with passive metals or inert surfaces, or where large gaps are involved.
- Package size: 300ml/aerosol can
- Order number: 176421

Physical Properties

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<tr>
<th>Product code</th>
<th>Color</th>
<th>Specific gravity (g/cm³)</th>
<th>Viscosity (Pa·s)</th>
<th>Minimal clearance (mm)</th>
<th>Shear strength (MPa)</th>
<th>Tensile (200% mod) (%)</th>
<th>Full-cure time (h)</th>
<th>Temperature range (°C)</th>
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<td>1609</td>
<td>Green</td>
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Test condition: temperature 23±2 °C, Relative humidity 50±5%.

Bearings Retaining
Axle Retaining
Plug Retaining
Pre-applied Thread Sealants

TONSAN pre-applied thread lockers can maintain dry status after applied and can be stored for a long time, which are widely used for mass production and fast pace assembly.

Properties
- Easy to operate, reliable quality  
- Very low odor, no dissolvent  
- Excellent dissolvent resistance

1204 Pre-applied Thread Sealant (Locking)
Double components, high strength, pre-applied thread locker that reliably secures and seals thread fasteners up to M20.
Package size: 500g/set  
Order number: 12040802

1513 Pre-applied Dry Film Thread Sealant (Sealing)
White color, single component, low viscosity, elastic rubber coat will be formed after cured. Suitable for sealing thread components. Apply for sealing fuel, lubrication, and most industrial gas and liquid.
Package size: 2kg/pail  
Order number: 15130205

1516 Pre-applied Dry Film Thread Sealant (Sealing)
Package size: 500g/bottle  
Order number: 151601
Package size: 2kg/pail  
Order number: 151605

Physical Properties

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<th>Destabilising moment (Nm)</th>
<th>Lubricity</th>
<th>Flashing point (°C)</th>
<th>Pour point (°C)</th>
<th>Temperature range (°C)</th>
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<tr>
<td><strong>1204</strong></td>
<td>Nib</td>
<td>6000</td>
<td>40</td>
<td>Medium</td>
<td>72</td>
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<table>
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<th>Max. oil pressure (MPa)</th>
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<td>White</td>
<td>2000</td>
<td>24h (85°C)</td>
<td>15</td>
<td>-30 to 150</td>
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<tr>
<td><strong>1516</strong></td>
<td>Iron red</td>
<td>6000</td>
<td>24h (90°C)</td>
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<td>-30 to 150</td>
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</table>

Test condition: temperature 23±2 °C; Relative humidity 50±5%
Structure Adhesives

TONSAN Structure Adhesives are developed for structural bonding applications that require tensile, shear and peel strength combined with maximum impact resistance. Easy to operate, high strength, no need special equipment, anti stripping, impact resistance. They form to a tough, durable bond to a wide variety of substrates, including metals, plastics and composites. Enable the bonding of different materials, replacing spot welding and rivets.

Properties
- High viscosity
- Evenly stress distribution on the joint surface, no heat impact and no deformation to components
- Fast curing speed to improve operation efficiency
- Widely used for bonding different materials

Acrylic Structure Adhesives

TS802 High Strength Adhesive
(General Purpose)
- White color. Double components, high strength adhesive, fast fixture in 5 minutes. Suitable for bonding and self-bonding of metal, plastic, leather and wood (not suitable for copper).
- Package size: 400ml/set
- Order number: 082001

TS805 High Strength Structure Adhesives
(Easy to Operate)
- White color. Double components, high viscosity, fast fixture in 30 minutes. Suitable for bonding and self-bonding of metal, plastic, leather and wood (not suitable for copper).
- Package size: 400ml/set
- Order number: 280501

TS806 Rail Steel Band Adhesive
(Specialized Bonding)
- White color. Double components, oil resistance, high viscosity, 30 minutes operating time, easy to precisely fixture. Especially for bonding steel band of guide rail.
- Package size: 2kg/set
- Order number: 280605

TS807 General Type Structural Adhesive
- Taup.1.1 two components acrylate structural adhesive for general use. Low viscosity, flowable. Cured layer has high resistance to impact. Especially suitable for bonding plastic and metal with a minimum of surface preparation.
- Package size: 2kg/set
- Order number: 28070105

TS808 Low Odor Structural Adhesive
- Blue purple. Double components, volume ratio 1:1. Fast fixture time is 5-8 minutes at room temperature and fast curing at high temperature. Cured layer has high toughness and resistance to impact. Especially suitable for bonding metal.
- Package size: 400ml/set
- Order number: 08200105

TS809 High Performance Acrylic Structure Adhesive
- Dark Green. Double components, could be able to cure in 5 minutes with volume ratio 1:1, and reach to 80% ultra strength in 20 minutes, high strength of thermal aging. Good toughness and easy to peel of adhesive layer. With wide range of bonding, suitable for bonding and self-bonding of various materials such as metal, plastic and fiberglass, etc.
- Package size: 40mlmillet
- Order number: 08300205

TS828 High Performance Acrylic Structure Adhesive
- Dark green. Double components, volume ratio 10:1. Fast fixture time is 12-15 minutes at room temperature. Cured layer has high toughness, good resistance to peeling off, and high strength after thermal aged. Provide strong bonding for a variety of materials, especially suitable for large area bonding.
- Package size: 400ml/set
- Order number: 08280002

TS830 High Performance Structural Adhesive
- Dark green. Double components, volume ratio 10:1. Cured layer has high toughness and good resistance to medium and aging. Especially suitable for bonding structures working under high temperature conditions.
- Package size: 50ml/set
- Order number: 08300202

Epoxy Structure Adhesives

TS811 High Strength Structure Adhesive
(High Strength)
- Light yellow. Double components, impact absorbing epoxy. Excellent tensile and shear strength. Unique structure adhesive with wide applications for bonding and self-bonding metals, ceramics and plastics.
- Package size: 250g/set
- Order number: 281101

TS813 5 Minutes Epoxy
- Transparent. Double components, flowable, good toughness, easy to operate. Quick fixture in 5 minutes with good toughness. Suitable for fast bonding various substrates, such as metal, glass, wood, part of plastics and ceramics.
- Package size: 50ml/set
- Order number: 083101

TS814 30-Minute Clear Epoxy
(Easy to Operate)
- Transparent. Double components, flowable, good toughness, easy to operate, and curing in 30 minutes. Provide strong bonding to glass, metals, parts of plastics, ceramics and wood combinations.
- Package size: 50ml/set
- Order number: 081401

TS816 High Toughness Epoxy Structure Adhesive
- Transparent. Double components, yellow color, flowable, industrial adhesive, first curing in 30 minutes, good toughness, good strength. Provide strong bond to metals, jewelry, stones, wood, ceramics and most of plastics.
- Package size: 50ml/set
- Order number: 08160002

TS818 Abrasion Resistance Ceramics Epoxy
- Grey color. Double components, putty, suitable for bonding to metal, stones, wood, ceramic and most of plastic, especially for the wear resistance ceramic bonding.
- Package size: 10kg/set
- Order number: 08180202

TS832 High Strength And High Temperature Resistant Epoxy Adhesive
- Yellow color. Double components, volume ratio in 2:1, high strength and good toughness, heat resistance up to 150°C in long term and 180°C in short time. Low viscosity, suitable for potting bonding and have a good bonding performance to metal, stone, wood, ceramic and most of plastics.
- Package size: 400ml/ret
- Order number: 08320020

TS843 High Temperature Resistant Epoxy Adhesive
- Grey black. Double components, volume ratio in 2:1, high strength and good toughness, heat resistance can up to 150°C in long-term and 180°C in short time. High viscosity, suitable for potting bonding, thixotropic, not flow on vertical surface. Suitable for mental and other parts bonding in high temperature and harsh conditions.
- Package size: 400ml/ret
- Order number: 08430020

Polyurethane Structure Adhesives

TS850 Double Components Polyurethane Adhesive
- Black color. Double components, initial curing in 30 minutes, and could work in vertical surface. Excellent bonding performance, impact resistance and water proof, with both good corrosion resistance and electrical insulation. Special suitable for bonding of insulation and metal materials, such as SMC, BMC, RTM, FFP, etc.
- Package size: 60ml/set
- Order number: 08050205

TS956 Polyurethane Adhesive
- Light yellow. Double components, weight ratio of 4:1, high strength and high toughness. Excellent bonding performance, impact resistance and water proof, with both good corrosion resistance and electrical insulation. Suitable for bonding of all kinds of composite materials, special for metal materials and fibre reinforced composites.
- Package size: 10kg/set
- Order number: 09560205

Other Structure Adhesives

TS812 High Temperature Bonder
- Black color. Double components, High muffy coupling strength. Thermal durability up to 780°C. Suitable for bonding of muffy coupling components.
- Package size: 250g/set
- Order number: 081201

1328 Anaerobic Structure Adhesive
(Ferrite Bonding)
- Light yellow. High strength, high viscosity, fast curing, excellent impact resistance. Suitable for ferrite bonding with activator 1764.
- Package size: 50ml/bottle
- Order number: 132631

1764 Activator
- Specially designed for anaerobic adhesives. Apply to shorten the curing time, the adhesives under low temperature, in applications with passive metal or inert surfaces, or where large gaps are involved.
- Package size: 50ml/cans
- Order number: 176421
### Structure Adhesives

#### Physical Properties

<table>
<thead>
<tr>
<th>Product code</th>
<th>Color</th>
<th>Specific gravity (g/cm³)</th>
<th>Viscosity (MPa·s)</th>
<th>Gap Fill (mm)</th>
<th>Shear strength (MPa)</th>
<th>Flexure (MPa)</th>
<th>Tensile (MPa)</th>
<th>Peel (MPa)</th>
<th>Storage life (day)</th>
<th>Temperature range (°C)</th>
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<tbody>
<tr>
<td><strong>Acrylic Structure Adhesives</strong></td>
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#### Other Structure Adhesives

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<th>Specific gravity (g/cm³)</th>
<th>Viscosity (MPa·s)</th>
<th>Gap Fill (mm)</th>
<th>Shear strength (MPa)</th>
<th>Flexure (MPa)</th>
<th>Tensile (MPa)</th>
<th>Peel (MPa)</th>
<th>Storage life (day)</th>
<th>Temperature range (°C)</th>
</tr>
</thead>
<tbody>
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<td>Gap Fill (mm)</td>
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<td>Flexure (MPa)</td>
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<td>50.0</td>
<td>1</td>
<td>-</td>
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<td>24 ~ 70</td>
<td></td>
</tr>
</tbody>
</table>

---

**Polyurethane Sealants & Adhesives**

TONSAN Polyurethane Sealants & Adhesives can be used for bonding and sealing of windshield, side and rear glass, body panel, front & rear surrounding and trim. It also can be used for sealing of container, steel structure and refrigeration storage.

#### Properties

- Aging resistance, fatigue resistance  
- Single component, easy to operate  
- Excellent temperature resistance  
- Good sealing and bonding performance for various substances  
- Solvent free, no pollution
Polyurethane Sealants & Adhesives

**1924 Polyurethane Sealants**

Single component, white color/black color/grey color available, good flexibility, excellent water proof ability, high viscosity, oil resistance, water resistance, aging resistance and salt mist resistance. Good long time vibration fatigue resistance. Suitable for vehicle, container, steel structure, and refrigerator sealing.

**White color:**
- Package size: 310ml/cartridge Order number: 192401
- Package size: 400ml/sausage Order number: 192404
- Package size: 600ml/sausage Order number: 192406

**Black color:**
- Package size: 310ml/cartridge Order number: 192201
- Package size: 400ml/sausage Order number: 192204
- Package size: 600ml/sausage Order number: 192206

**Grey color**
- Package size: 310ml/cartridge Order number: 192301
- Package size: 400ml/sausage Order number: 192304
- Package size: 600ml/sausage Order number: 192306

**1756 Polyurethane Cleaner**

Alcoholic solution, improve the bonding strength between TONSAN Polyurethane Adhesives and the substances. Remove the oil of the bonding surface before using. Suitable for cleaning metal, synthetic material, glass and painted surface. (Note: This product will darken the paint surface, please pre-test before using.)

- Package size: 500ml/bottle Order number: 175601

**1925UV Polyurethane Sealants**

Black color, single component, moisture curing, good flexibility, excellent UV resistance, water proof and anti-aging resistance. Suitable for sealing of vehicle glass and window frame, and the exposure parts.

- Package size: 600ml / sausage Order number: 19561206

**1761 Metal Bonding Primer**

Low viscosity, light yellow color, transparent liquid. Suitable for pre-treatment of metal, plastic and painted surface to improve bonding strength.

- Package size: 250ml/bottle Order number: 176101

**1762 Glass Bonding Primer**

A black thick liquid. It is used to improve bonding strength between TONSAN PU sealants, glass and ceramic. Suitable for pre-treatment of metal, plastic and painted surface. (Note: Please shake evenly before using)

- Package size: 250ml/bottle Order number: 17621202

**Physical Properties**

<table>
<thead>
<tr>
<th>Product code</th>
<th>Color</th>
<th>Specific gravity (g/cm³)</th>
<th>Tack free time (min)</th>
<th>Elongation at break (%)</th>
<th>Tensile strength (MPa)</th>
<th>Shear strength (MPa)</th>
<th>Hardness (Shore A)</th>
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<tbody>
<tr>
<td>1924</td>
<td>White-Black-Grey</td>
<td>1.20</td>
<td>30-60</td>
<td>60</td>
<td>2.6</td>
<td>2.2</td>
<td>50</td>
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<tr>
<td>1925UV</td>
<td>Black</td>
<td>1.24</td>
<td>30-60</td>
<td>60</td>
<td>2.6</td>
<td>4.0</td>
<td>50</td>
</tr>
<tr>
<td>1956</td>
<td>Black</td>
<td>1.24</td>
<td>30-60</td>
<td>60</td>
<td>2.6</td>
<td>4.0</td>
<td>50</td>
</tr>
</tbody>
</table>

Test condition: temperature 23±2℃; Relative humidity 50±5%

**1924 Polyurethane Sealants (General Purpose)**

black color,Single component, good flexibility, excellent water proof ability, high strength. Suitable for windshield, side and rear glass, body panel, front & rear surrounding and trim to vehicle, train and vessel assemblies.

- Package size: 310ml/cartridge Order number: 19561201
- Package size: 400ml/sausage Order number: 19561204
- Package size: 600ml/sausage Order number: 19561206
Modified Silane Sealants & Adhesives

TONSAN Modified Sealants and Adhesives demonstrate good adhesion without primer to various substances. They are widely used for elastic bonding and sealing applications where high strength and weather resistance are required.

Properties
- Low odor
- No primer needed
- Excellent aging and UV resistance
- No mildew
- Paintable

**STP1921**
Modified Silane Sealants and Adhesives

- White, grey and black color, single component, suitable for elastic sealing of vehicle and engineering machinery assembly.

  **White color package size:**
  - Order number: 192141
  - Order number: 192144
  - Order number: 192146

  **Grey color package size:**
  - Order number: 192161
  - Order number: 192164
  - Order number: 192166

  **Black color package size:**
  - Order number: 192151
  - Order number: 192154
  - Order number: 192156

**STP1920**
Modified Silane Sealants

- White and black color, single component, moisture curing, low viscosity, flowable. Suitable for elastic sealing of fiberglass, plywood, teakwood, metal, metal primer and paint, etc.

  **White color package size:**
  - Package size: 600ml
  - Order number: 1937406

  **Black color package size:**
  - Package size: 600ml
  - Order number: 1937506

**MS1937**
Modified Silane Sealants And Adhesives

- White, grey and black color, single component, fast curing, high module. Suitable for bonding and sealing in bus, train, truck, vessel, container and ventilation system assembly.

  **White color package size:**
  - Package size: 430g/cartridge
  - Package size: 400ml/sausage
  - Package size: 600ml/sausage
  - Order number: 193701
  - Order number: 193704
  - Order number: 193706

  **Black color package size:**
  - Package size: 430g/cartridge
  - Package size: 400ml/sausage
  - Package size: 600ml/sausage
  - Order number: 193711
  - Order number: 193714
  - Order number: 193716
  - Order number: 193718

**MS1937S**
Modified Silane Sealants And Adhesives

- Black color, single component, high elasticity, flame retardant type. Suitable for sealing and bonding where flame retardant is required, such as rail vehicle and elevator etc.

  **Black color package size:**
  - Package size: 400ml/sausage
  - Package size: 600ml/sausage
  - Order number: 1937906
  - Order number: 19379106

**MS1939FR**
Modified Silane Sealants And Adhesives

- Black color, single component, high module, with outstanding adhesion to many kinds of substrates. Long tack free time, meet the demand of long operation time working condition and high temperature in summer season.

  **Black color package size:**
  - Package size: 400ml/sausage
  - Order number: 1939114
  - Package size: 600ml/sausage
  - Order number: 1939116

**MS1937S**
Modified Silane Sealants And Adhesives

- White and black color, single component, moisture curing, high module. With outstanding adhesion to many kinds of substrates. Long tack free time, meet the demand of long operation time working condition and high temperature in summer season.

  **White color package size:**
  - Package size: 400ml/sausage
  - Order number: 1937906

**MS1937**
Modified Silane Sealants And Adhesives

- White and black color, single component, high module. Suitable for bonding and sealing in bus, train, truck, vessel, container and ventilation system assembly.

  **White color package size:**
  - Package size: 430g/cartridge
  - Package size: 400ml/sausage
  - Package size: 600ml/sausage
  - Order number: 193701
  - Order number: 193704
  - Order number: 193706

**Physical Properties**

<table>
<thead>
<tr>
<th>Product code</th>
<th>Color</th>
<th>Specific gravity (g/cm³)</th>
<th>Tack free time (min)</th>
<th>Cure speed (mm)</th>
<th>Tensile strength (MPa)</th>
<th>Shear strength (MPa)</th>
<th>Hardness (Shore A)</th>
<th>Temperature range (°C)</th>
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<tbody>
<tr>
<td>STP1920</td>
<td>White-Black</td>
<td>1.33</td>
<td>20-30</td>
<td>40-48</td>
<td>50-58</td>
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</tr>
<tr>
<td>STP1921</td>
<td>White-Black Grey</td>
<td>1.45</td>
<td>20-30</td>
<td>30-40</td>
<td>30-40</td>
<td>0-60</td>
<td>52</td>
<td>-50 to 90</td>
</tr>
<tr>
<td>MS1937</td>
<td>White-Black Grey</td>
<td>1.45</td>
<td>5-20</td>
<td>20-40</td>
<td>20-40</td>
<td>0-60</td>
<td>52</td>
<td>-40 to 180</td>
</tr>
<tr>
<td>MS1937S</td>
<td>White-Black</td>
<td>1.45</td>
<td>20-40</td>
<td>40-48</td>
<td>30-40</td>
<td>0-60</td>
<td>52</td>
<td>-40 to 180</td>
</tr>
<tr>
<td>MS1939FR</td>
<td>Black</td>
<td>1.45</td>
<td>5-20</td>
<td>20-40</td>
<td>50-58</td>
<td>0-60</td>
<td>52</td>
<td>-40 to 180</td>
</tr>
</tbody>
</table>

*Test condition: temperature 23±2°C; Relative humidity 50±5%*
Cyanoacrylate Adhesives

TONSAN Cyanoacrylate Adhesives are new generation products of α-Cyanoacrylate. Quick fixture and suitable for bonding various substances such as metal, rubber, plastic, glass, feather, and ceramic.

Properties
- Fast curing in seconds
- Single component, easy to operate
- High strength
- Suitable for bonding various substances
- Low odor, low blooming
- Good temperature resistance

1401 Instant Adhesive (Fast Curing)
Transparent. Medium viscosity, high strength, fast curing. Suitable for bonding various substances surfaces, especially for the inert and acid surfaces such as rubber, leather, wood, plywood and card board and cork wood.
Package size: 20g/bottle Order number: 14010202

1406 Instant Adhesive (Toughened)
Transparent. Low viscosity, high strength, fast curing. Suitable for bonding various substances surface, especially for the difficult-to-bond rubber and plastic surfaces such as loudspeaker parts, lamp shade, plastic electric fan, plastic motor shell, and rubber O-ring.
Package size: 20g/bottle Order number: 14062202

1414 Instant Adhesive (Humidity Resistance)
Transparent. Medium viscosity, fast curing, humidity resistance and good weather resistance. Suitable for bonding materials such as plastic, rubber, ceramic.
Package size: 20g/bottle Order number: 141411

1420 Instant Adhesive (General Purpose)
Transparent. General purpose with low viscosity and fast curing. Used for bonding penetrated plastic and rubber.
Package size: 20g/bottle Order number: 142001

1454 Instant Adhesive (For Large Gap)
Transparent. Paste, not flow, high strength, vertical surface bonding. Suitable for various substances such as inert, porous, acid, and absorbing materials, especially for bonding large gap or roughened surfaces.
Package size: 20g/pc Order number: 145401

1495 Instant Adhesive (Peeling Resistance)
Transparent. Medium viscosity, good peeling resistance. Suitable for bonding rubber, metal and plastic.
Package size: 20g/bottle Order number: 14950202

1382 Instant Adhesive (Electronic Bonding)
Transparent. High viscosity, high strength, high temperature resistance. Suitable for bonding and fixture of electronic products, such as jumper wire fixing.
Package size: 20g/bottle Order number: 138201

1480 Instant Adhesive (Impact and Vibration Resistance)
Black color, medium viscosity, excellent impact resistance, vibration resistance, peeling resistance, and heat resistance.
Package size: 20g/bottle Order number: 148001

1496 Instant Adhesive (Metal Bonding)
Transparent. Medium viscosity, especially for fast bonding between metals, or metal with other materials.
Package size: 20g/bottle Order number: 149601

1745 Instant Adhesive Activator
Applied for shorten curing time of TONSAN cyanoacrylate adhesives. It can be either pre or post-applied. Post-applied is preferred.
Package size: 250ml/bottle Order number: 174501
Package size: 50ml/bottle Order number: 174502 (Brush painting/spray painting)

1768 Cyanoacrylate Remover
A solvent suitable for clearing and resolving redundant cured cyanoacrylate adhesives.
Package size: 250g/bottle Order number: 176801

1770 Cyanoacrylate Primer
Used for the treatment of difficult-to-bond materials, such as polypropylene, polyethylene, PTFE.
Package size: 20ml/bottle Order number: 177001
Package size: 50ml/bottle Order number: 177004 (Brush painting/spray painting)
Cyanoacrylate Adhesives

Physical Properties

<table>
<thead>
<tr>
<th>Product code</th>
<th>Color</th>
<th>Viscosity (mPa·s)</th>
<th>Gap fill (mm)</th>
<th>Shear strength (steel-steel) (MPa)</th>
<th>Fixture time (s)</th>
<th>Fully cure time (h)</th>
<th>Temperature range (℃)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1382</td>
<td>Transparent</td>
<td>5000</td>
<td>0.23</td>
<td>22.0</td>
<td>40</td>
<td>24</td>
<td>-50 ~ 120</td>
</tr>
<tr>
<td>1401</td>
<td>Transparent</td>
<td>110</td>
<td>0.10</td>
<td>21.0</td>
<td>10</td>
<td>24</td>
<td>-50 ~ 120</td>
</tr>
<tr>
<td>1406</td>
<td>Transparent</td>
<td>30</td>
<td>0.10</td>
<td>20.0</td>
<td>10</td>
<td>24</td>
<td>-50 ~ 120</td>
</tr>
<tr>
<td>1414</td>
<td>Transparent</td>
<td>110</td>
<td>0.15</td>
<td>20.0</td>
<td>20</td>
<td>24</td>
<td>-50 ~ 120</td>
</tr>
<tr>
<td>1415</td>
<td>Transparent</td>
<td>1200</td>
<td>0.23</td>
<td>23.0</td>
<td>60</td>
<td>24</td>
<td>-50 ~ 80</td>
</tr>
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<td>Transparent</td>
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<td>30</td>
<td>24</td>
<td>-50 ~ 80</td>
</tr>
<tr>
<td>1454</td>
<td>Paste</td>
<td>0.25</td>
<td>22.0</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>-50 ~ 80</td>
</tr>
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<td>24</td>
<td>-30 ~ 150</td>
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<tr>
<td>1480</td>
<td>Black</td>
<td>380</td>
<td>0.15</td>
<td>20.0</td>
<td>120</td>
<td>24</td>
<td>-50 ~ 100</td>
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<tr>
<td>1495</td>
<td>Transparent</td>
<td>45</td>
<td>0.10</td>
<td>25.0</td>
<td>30</td>
<td>24</td>
<td>-50 ~ 120</td>
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<tr>
<td>1496</td>
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<td>0.15</td>
<td>21.0</td>
<td>40</td>
<td>24</td>
<td>-50 ~ 80</td>
</tr>
</tbody>
</table>

Test condition: temperature 25±2 ℃; Relative humidity 50±3%

UV Cure Adhesives

TONSAN UV Cure Adhesives are single component, which can cure in seconds when exposed to UV light (300nm-400nm). Widely used for bonding, coating and sealing of electronic, medical instruments, arts craft, optical instruments and glass furniture.

Properties

- Single component
- Easy to operate
- Fast curing when exposed to UV light
- Low odor, solvent free
- Colorless and transparent layer

1866 UV Cure Adhesive
(Medium Viscosity, High Strength)
Transparent. Medium viscosity, fast curing. Specialized for small scale bonding of glass arts and crafts. Can be used for other kinds of materials as well.
Package size: 250g/bottle Order number: 186605

1868 UV Cure Adhesive
(Low Viscosity, High Strength)
Transparent. Low viscosity, fast curing. Specialized for large scale bonding of glass arts and crafts. Can be used for other materials as well.
Package size: 250g/bottle Order number: 186805

Physical Properties

<table>
<thead>
<tr>
<th>Product code</th>
<th>Color</th>
<th>Viscosity (mPa·s)</th>
<th>Cure speed (s)</th>
<th>Compressive shear strength (MPa)</th>
<th>Hardness (Shore D)</th>
<th>Temperature range (℃)</th>
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</thead>
<tbody>
<tr>
<td>1866</td>
<td>Transparent</td>
<td>550</td>
<td>3</td>
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<td>75</td>
<td>-30 ~ 150</td>
</tr>
<tr>
<td>1868</td>
<td>Transparent</td>
<td>80</td>
<td>3</td>
<td>20</td>
<td>80</td>
<td>-30 ~ 150</td>
</tr>
</tbody>
</table>
Metal Rebuilding Putty

TONSAN metal rebuilding putty are epoxy material reinforced by metal and alloy. Suitable for repairing and sealing the slag blowholes, shrinkage cavity, sand hole and cracks in casting of iron, steel, cooper and aluminum.

Properties

- Erosion resistance
- High combination strength with metals
- No curing shrinkage
- Good construction performance, basically the same color with rebuilt substrate
- Conform to JB/T10283-2008 Construction machinery—Engineering repair putty—Application technical specifications

TS101 Casting Defect Rebuilding Putty
(Double Size Defect)
Grey color. Double components, putty, general purpose. Used for repairing and restoring blowholes, shrinkage cavity, sand holes and cracks in castings with defect size over 2mm. Able to apply under low temperature and humidity.
Package size: 500g/set Order number: 210101

TS102 Casting Defect Rebuilding Putty
(1 Small Size Defect)
Grey color. Double components, flowable. Used for repairing and restoring blowholes, shrinkage cavity, sand holes and cracks in castings with defect size smaller than 2mm.
Package size: 250g/set Order number: 210201

Super Metal Rebuilding Putty

TS2111 Grey color. Double components, putty, high strength, good comprehensive mechanical performance. Available to use in winter. Apply to repair the blowholes, shrinkage cavity, sand hole and cracks in castings, and repair the worn, corroded, cracked components.
Package size: 500g/set Order number: 211101

Iron Putty

TS111 Double components, putty. Suitable for repairing and restoring of blowholes, shrinkage cavity, sand holes and cracks in cast iron parts.
Package size: 500g/set Order number: 011101

Steel Putty

TS112 Double components, putty. Steel-reinforced epoxy with excellent mechanical performances. Suitable for repairing the abrasion, scratch, corrosion and cracks of steel parts.
Package size: 500g/set Order number: 011201

Aluminum Putty

TS113 Double components, putty. Aluminum-filled epoxy putty. Suitable for repairing the defects of cast aluminum parts.
Package size: 250g/set Order number: 011301

Copper Putty

TS114 Double components, putty, copper-filled epoxy. Suitable for rebuilding copper bushings, shafts, castings and defected parts.
Package size: 250g/set Order number: 011401

Penetrator – High Penetration

TS121 Green color. Single component, flowable, low viscosity with high strength and excellent sealing performance. Suitable for sealing shrinkage porosity and micro-shrinkage in alloy castings. No requirement for heating and pressure.
Package size: 50ml/bottle Order number: 012101
Package size: 250ml/bottle Order number: 012105

Casting Defect Rebuilding Putty

TS101 Casting Defect Rebuilding Putty
(Big Size Defect)
Grey color. Double components, putty, general purpose. Used for repairing and restoring blowholes, shrinkage cavity, sand holes and cracks in castings with defect size over 2mm. Able to apply under low temperature and humidity.
Package size: 500g/set Order number: 210101

TS102 Casting Defect Rebuilding Putty
(Small Size Defect)
Grey color. Double components, flowable. Used for repairing and restoring blowholes, shrinkage cavity, sand hole and cracks in castings with defect size smaller than 2mm.
Package size: 250g/set Order number: 210201

Flange Repairing
Pulley Repairing
Pressure Vessel Repairing
Metal Rebuilding Putty

Physical Properties

<table>
<thead>
<tr>
<th>Product code</th>
<th>Color</th>
<th>Specific gravity (g/cm³)</th>
<th>Microtensile strength (MPa)</th>
<th>Microhardness (Shore D)</th>
<th>Compressive strength (MPa)</th>
<th>Tensile strength (MPa)</th>
<th>Shear strength (MPa)</th>
<th>Residual strength (MPa)</th>
<th>Hardness (Shore D)</th>
<th>Cure time (h)</th>
<th>Temperature range (°C)</th>
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</thead>
<tbody>
<tr>
<td>TS101</td>
<td>Grey</td>
<td>1.65</td>
<td>7.1</td>
<td>65</td>
<td>80.0</td>
<td>35.0</td>
<td>28.0</td>
<td>85.0</td>
<td>60</td>
<td>16</td>
<td>-60 – 120</td>
</tr>
<tr>
<td>TS102</td>
<td>Grey</td>
<td>1.60</td>
<td>7.1</td>
<td>63</td>
<td>85.0</td>
<td>35.0</td>
<td>28.0</td>
<td>87.0</td>
<td>60</td>
<td>16</td>
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<tr>
<td>TS111</td>
<td>Cast Iron</td>
<td>1.62</td>
<td>7.1</td>
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<td>42.0</td>
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<td>TS112</td>
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<td>TS113</td>
<td>Maintain</td>
<td>1.41</td>
<td>6.1</td>
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<td>TS114</td>
<td>Brass</td>
<td>1.55</td>
<td>6.1</td>
<td>63</td>
<td>110.0</td>
<td>43.0</td>
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<td>54.0</td>
<td>81</td>
<td>24</td>
<td>-60 – 160</td>
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<tr>
<td>TS121</td>
<td>Green</td>
<td>1.38</td>
<td>Single component</td>
<td>-</td>
<td>110.0</td>
<td>-</td>
<td>12.0</td>
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<td>TS2111</td>
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<td>1.97</td>
<td>7.1</td>
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<td>77.0</td>
<td>85</td>
<td>24</td>
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</table>

Adhesive Volume

<table>
<thead>
<tr>
<th>Product code</th>
<th>TS101</th>
<th>TS102</th>
<th>TS111</th>
<th>TS112</th>
<th>TS113</th>
<th>TS114</th>
<th>TS121</th>
<th>TS2111</th>
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</thead>
<tbody>
<tr>
<td>Standard package</td>
<td>500g/set</td>
<td>250g/set</td>
<td>500g/set</td>
<td>500g/set</td>
<td>250g/set</td>
<td>250g/set</td>
<td>250g/bottle</td>
<td>50ml/bottle</td>
</tr>
<tr>
<td>Volume (g/cm³)</td>
<td>300</td>
<td>175</td>
<td>389</td>
<td>298</td>
<td>177</td>
<td>168</td>
<td>50</td>
<td>254</td>
</tr>
</tbody>
</table>

Test condition: temperature 23±2 °C; Relative humidity 50±5%
- When the temperature is below 15 °C, some heating measures should be adopted, or the relevant curing time should be extended
- When mix volume is more than 200g, the working time will be shorter
- Above data is typical

Abrasion Resistance Compounds

Polymerized ceramic polymer technical is adopted by TONSAN Abrasion Resistance Compounds to supply engineering solutions for anti-abrasion under different conditions.

Properties

- Suitable for powder, fine particles, and big particles conditions  
- Great combination between coating and substrate  
- High anti-abrasion property  
- Extending maintenance period, reduce shrinkage  
- Easy operation, reduce shut-down time
Abrasion Resistance Compounds

**TS215** Abrasion Resistance Rebuilding Putty
(Super Abrasion Resistance)
Black color. Double components, titanium alloy-reinforced epoxy putty with high hardness metallic carbide materials. The relative abrasion resistance is 2.3 times stronger than medium carbon steel. Excellent pressure and impact tolerance. Apply to repair of axels, axel holes, multiple keys and keyways.
Package size: 500g/set
Order number: 221501

**TS216** Abrasion Resistance Rebuilding Putty
(Powder Wear and Gas Erosion Resistance)
Package size: 500g/set
Order number: 221601

**TS218** Anti-abrasion Putty (Medium Particle Compound)
Grey color. Double components. Reinforce epoxy filled with ceramic beads and silicon carbide. For rebuilding and protecting equipment worn by big articles, such as pipe, pump housing, impeller and so on.
Package size: 500g/set
Order number: 221801

**TS226** Abrasion Resistant Coating
(Fine Particle Compound)
Grey color. Double components. Micro-alumina ceramic bead filled epoxy. Renews worn surfaces fast, reducing downtime to put equipments back in service. For rebuilding and protecting equipments worn by fine particles, such as scrubs, ash handling systems, pipe elbows and chutes.
Package size: 2kg/set
Order number: 222606
Package size: 10kg/set
Order number: 22260302

**TS228** Abrasion Resistant Coating
(Hard Sliding)
Grey color. Double components. Reinforce epoxy filled with large ceramic beads and fine alumina carbide filled epoxy for maximum protection against hard sliding abrasion, such as screen, slurry pump, sorting machine and screw conveyors.
Package size: 2kg/set
Order number: 222806
Package size: 10kg/set
Order number: 222802

**TS236** Fast-curing Wear Resistant Coating
(Low Temperature Fast-curing)
Package size: 500g/set
Order number: 023601
Package size: 10kg/set
Order number: 023602

**TS238** Fast-curing Wear Resistant Coating
(Low Temperature Fast-curing)
Package size: 10kg/set
Order number: 023801

**TS246** High temperature Wear Resistance Coating
Double components. Super hard ceramic and wear resistance fine filled epoxy. Designed for abrasion resistance at high temperature up to 250 °C.
Package size: 500g/set
Order number: 024601
Package size: 10kg/set
Order number: 024605

**TS256** Brushable Wear And Corrosive Resistance Coating
White color. Low odor, double components, the moderate epoxy viscosity can be applied by brush which provides a high gloss, low friction coating to protect against turbulence, abrasion and cavitation.
Package size: 10kg/set
Order number: 22560202 white
Package size: 1kg/set
Order number: 22560402 blue
Package size: 1kg/set
Order number: 22560202 yellow

Chute Repairing
Coal Feeder Side Panel Repairing
Anti-abrasion Coating

### Physical Properties

<table>
<thead>
<tr>
<th>Product code</th>
<th>Color</th>
<th>Specific gravity (g/cm³)</th>
<th>Mix ratio (A:B)</th>
<th>Microhardness (HRA)</th>
<th>Working time (min)</th>
<th>Compressive strength (MPa)</th>
<th>Shear strength (MPa)</th>
<th>Thermal insulation 3h Room temperature (h)</th>
<th>Temperature range (°C)</th>
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<td>1.85</td>
<td>2.2 1</td>
<td>1.6</td>
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<td>125.0</td>
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<td>TS216</td>
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<td>2.43</td>
<td>2.8 1</td>
<td>1.6</td>
<td>65</td>
<td>112.0</td>
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<td>14.0</td>
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<tr>
<td>TS218</td>
<td>Grey</td>
<td>2.43</td>
<td>2.8 1</td>
<td>1.6</td>
<td>65</td>
<td>115.0</td>
<td>38.0</td>
<td>6.3</td>
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<td>TS226</td>
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<td>2.2 1</td>
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<td>95.0</td>
<td>38.0</td>
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<td>2.37</td>
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<td>2.8</td>
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<td>97.0</td>
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<td>5.0</td>
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<td>TS236</td>
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<td>2.5 1</td>
<td>2.2</td>
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<td>2.29</td>
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<td>38.0</td>
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<td>TS256</td>
<td>White</td>
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<td>100.0</td>
<td>36.0</td>
<td>28.0</td>
<td>24 ~ -60 ~ 150</td>
</tr>
</tbody>
</table>

*Note:* Test condition: temperature 23 ± 2 °C, Relative humidity 50±5%.
*When the temperature is below 15 °C, some heating measures should be adopted; or the relevant curing time should be extended.
* When mix volume is more than 20%, the working time will be shorter.
* Above data is typical.
Low Friction Coating & Fixture Potting

TONSAN Low Friction Coatings and Fixture potting materials are based on specially formulated epoxy resins with the finest filler combinations. Suitable for coating and fixture of slide fitting surfaces.

**Properties**
- Magnify the joint area between rail surface and substrate
- Self-lubricated
- Good creeping resistance
- High strength combination with metals, excellent impact resistance
- Low shrinkage rate
- Conform to JB/T3578-2007 General technical rules for epoxy coating material on sliding lead-rail
- Conform to JB/T3579-2007 General specification rules for epoxy coating sliding lead-rail

**TS311 Low Friction Rebuilding Putty**
Black color. Double components, putty, unique low friction epoxy, encapsulated with blend of lubricating and abrasion resistant fillers. With excellent self-lubrication and abrasion resistance after curing. Recommended for rebuilding scored slid rail, gapped hydraulic rams and loose bearing housings.

Package size: 500g/set Order number: 231151

**TS312 Low Friction Coating**
Dark grey. Double components, medium viscosity, non-hydrating epoxy compound modified with lubrication and abrasion resistant fillers. Good adhesion to metals, wear resistant and high dimensional stability. Recommended for duplicate-in-place slide rail coating for large and heavy machineries.

Package size: 400g/set Order number: 231221

**TS316 Low Friction Coating**
Dark grey. Double components, medium viscosity, non-hydrating epoxy compound modified with lubrication and abrasion resistant fillers. Good adhesion to metals, wear resistant and high dimensional stability. Recommended for duplicate-in-place slide rail coating for large and heavy machineries.

Package size: 500g/set Order number: 231602

**TS315 High Friction Fixture Coating**
Grey color. Double components, flowable, high pressure resistance. A pourable epoxy compound that cures at room temperature and forms a extremely tough and durable solid. Reach high precision without machining. Apply to high precision assembly of bearing elements, bushings, pin guides and machine parts.

Package size: 500g/set Order number: 035351

**TS315 Marine Epoxy Gaske**
Double components, perfusion type epoxy compounds containing inert filler. Excellent heat resistance, impact resistance and compression resistance after curing. Self-extinguishing. Suitable for all kinds of equipment installation location of the vessel.

Package size: 8kg/set Order number: 23650202

**TS355 High Precision Fixture Coating**
Grey color. Double components, good fluidity, high pressure resistance. Suitable for precisely connecting and fixture of structure components with small gaps. Apply to adjusted gluing and aligning machine tool column, bed connection and coaxial fixture.

Package size: 550g/set Order number: 035501

**TS355 Filler Adhesive**
Blue color. Double components, good fluidity, low shrinkage rate, excellent pressure resistance. Suitable for filling great clearances of equipment, such as crusher, ball milling machine.

Package size: 20kg/set Order number: 09921200

**Physical Properties**

<table>
<thead>
<tr>
<th>Product code</th>
<th>Color</th>
<th>Specific gravity (g/cm³)</th>
<th>Mix ratio (A:B)</th>
<th>Working time (min)</th>
<th>Compression strength (MPa)</th>
<th>Smoothness (Shore D)</th>
<th>Distortion strength (MPa)</th>
<th>Tensile strength (MPa)</th>
<th>Hardness (Shore D)</th>
<th>Burning rate (mm/h)</th>
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<td>40 ~ 70</td>
<td>180.0</td>
<td>21.0</td>
<td>82</td>
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<td>1.08</td>
<td>1.68</td>
<td>2.4x10⁻⁸</td>
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<tr>
<td>TS312</td>
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<td>1.84 6 : 1</td>
<td>50 ~ 70</td>
<td>180.0</td>
<td>21.0</td>
<td>80</td>
<td>0.019</td>
<td>1.04</td>
<td>49.0x10⁻⁸</td>
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<td>81</td>
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<td>TS355</td>
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**Adhesive Volume**

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<td>TS355</td>
<td>243</td>
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<td>TS356</td>
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<tr>
<td>TS357</td>
<td>11429</td>
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</table>

Test conditions: Temperature 23±2℃; Relative humidity 50±5%.
Erosion Resistant Polymers

By combining an unique blend of inorganic chemical resistant reinforcing agents with a radically new, densely crosslinked polymer, TONSAN Erosion Resistant Polymers show excellent resistance to various acids, solvents and alkalis. Provide outstanding protection for metal surfaces subjected to erosions.

Properties

- Wide range chemical resistance
- Easy to operate, brushable and paintable
- Penetration resistance, no falling off
- Smooth surface, good erosion and gas erosion resistance

TS406 Erosion Resistance Coating
Green color. Double components, low viscosity, brushing, excellent acid and alkaline resistance. Designed for rebuilding corroded pumps, valves, fans, heat exchanger, tanks and vessels.
Package size: 500g/set  Order number: 246001

TS416 Erosion Resistance Putty
Black color. Double components, putty, excellent acid and alkaline resistance. Designed for rebuilding corroded pumps, valves, fans, heat exchanger, tanks and vessels.
Package size: 250g/set  Order number: 246101

TS426 Erosion Resistance Coating
Blue color. Double components, low viscosity, brushing, excellent medium resistance. Provides a smooth, protective baffier against erosion and corrosion.
Package size: 8kg/set  Order number: 246001
Package size: 500g/set  Order number: 246003

TS436 Anti-acid Coating
Black color. Double components, excellent acid resistance. Suitable for repairing erosion/corrosion of electrolyzer, water treating system, oil tanks.
Package size: 500g/set  Order number: 246002

TS478 Impact And Erosion Resistance Coating
Blue color. Double components, low viscosity, brushing. Using the epoxy toughening technology. Suitable for being used under the condition of vibration, temperature -alternating or impact.
Package size: 500g/set  Order number: 247002

TS496 Anti-inorganic Acid Coating
Dark blue. Double components, good inorganic acid resistance ability, with excellent corrosion resistance to dilute and some dense acid, 100% solid content and environment friendly coating.
Package size: 500g/set  Order number: 049601

TS426 Erosion Resistance Coating
By combining an unique blend of inorganic chemical resistant reinforcing agents with a radically new, densely crosslinked polymer, TONSAN Erosion Resistant Polymers show excellent resistance to various acids, solvents and alkalis. Provide outstanding protection for metal surfaces subjected to erosions.

Physical Properties

<table>
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<tr>
<th>Product code</th>
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<th>Micronard break strength (kgf)</th>
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<th>Compressive strength (MPa)</th>
<th>Tensile strength (MPa)</th>
<th>Shear strength (MPa)</th>
<th>Permanence (months)</th>
<th>Cured time @ 25℃ (min)</th>
<th>Temperature range (℃)</th>
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<td>4.1</td>
<td>30 ~ 45</td>
<td>110.0</td>
<td>48.0</td>
<td>19.0</td>
<td>63.0</td>
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<td>95.0</td>
<td>49.0</td>
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<td>27.0</td>
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Chemical Resistance

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<th>Alkali solution</th>
<th>Others</th>
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<td>0% HCl / HNO3</td>
<td>40% HNO3</td>
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</tr>
<tr>
<td></td>
<td>10% H2SO4</td>
<td>10% H2SO4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10% H3PO4</td>
<td>10% H3PO4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10% NaOH</td>
<td>40% NaOH</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10% NaCl</td>
<td>10% NaCl</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10% Na2CO3</td>
<td>10% Na2CO3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10% HCl / HNO3</td>
<td>40% HNO3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10% H2SO4</td>
<td>10% H2SO4</td>
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<td>10% H3PO4</td>
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<td>10% NaOH</td>
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<td>10% NaCl</td>
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<td></td>
<td>10% Na2CO3</td>
<td>10% Na2CO3</td>
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</tr>
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</table>

Test condition temperature 23±2℃, Relative humidity 50±5%.
- When the temperature is below 15℃, some heating measures should be adopted; or the relevant curing time should be extended.
- When viscosity is more than 200g, the working time will be shorter.
- Above data is typical.

RC-701 RC-702 RC-703 High Temperature Ceramic Resin
Solvent-free, environmentally-friendly and safe. Excellent acid resistance. Easily applied. Suitable for conditions under serious acid corrosion in thermal power, metallurgy and petrochemical industry.

RC-701 Prime coating  Package size: 8kg/set  Order number: 07010001
RC-702 Intermediate coating Package size: 10kg/set  Order number: 07020002
RC-703 Surface coating  Package size: 15kg/set  Order number: 07030002
Emergency Repair

TONSAN Emergency Repair Products are fast curing and applied for repairing, plugging of leaking pipes, tanks or damaged equipments. It can cure rapidly even under most severe conditions.

Properties

- Suitable for on-site emergency repair and plugging
- Fast curing, suitable for various substances
- Suitable for using in different weather conditions, even under low temperature
- Can be used under conditions with oil or water.

**TS518 Emergency Repair Putty**

Grey color. Double components, putty, high strength and good flexibility, curing in 5 minutes under normal temperature. Suitable for emergency repair of pipes and valves.

| Package size: 250g/set | Order number: 251801 |

**TS528 Emergency Repair Putty**

White color. Double components, suitable for oil surface, fast curing and fixture under low temperature. Applied for emergency repair to electrical transformers, oil tanks, oil pipes and flanges. (Not suitable for copper components repairing)

| Package size: 504g/set | Order number: 052801 |

**TS626 Wet-surface Repair Putty**

Brownish red. Double components, putty with high performance for repairing equipment in wet and low temperature condition (more than 5°C). Applied for repairing pipes, valves, pump coating and body shield in wet condition.

| Package size: 500g/set | Order number: 262601 |

**1720 Fiberglass Band**

Dewaxing and toughening treated. Designed for wrapping and strengthening the cracks of pipe or mechanical parts. Applied adhesion to the 1720 Fiberglass band before wrapping.

| Package size: 50mmX40mm/set | Order number: 172001 |
| Package size: 25mmX40mm/set | Order number: 172002 |

**Pressure Plugging Steel Stick**

Curing in 3-5 minutes, knead well by hands and then fill in the gap or cavern. Applied for plugging pipes, valves, tank and body shield under 0.3 Mpa pressure.

| Package size: 114g/set | Order number: 058201 |

**TS528 Emergency Repair Putty**

White color. Double components, putty, high strength and good flexibility, curing in 5 minutes under normal temperature. Suitable for emergency repair of pipes and valves. (Not suitable for copper components repairing)

| Package size: 504g/set | Order number: 052801 |

**TS626 Wet-surface Repair Putty**

Brownish red. Double components, putty with high performance for repairing equipment in wet and low temperature condition (more than 5°C). Applied for repairing pipes, valves, pump coating and body shield in wet condition.

| Package size: 500g/set | Order number: 262601 |

**1720 Fiberglass Band**

Dewaxing and toughening treated. Designed for wrapping and strengthening the cracks of pipe or mechanical parts. Applied adhesion to the 1720 Fiberglass band before wrapping.

| Package size: 50mmX40mm/set | Order number: 172001 |
| Package size: 25mmX40mm/set | Order number: 172002 |

**Pressure Plugging Steel Stick**

Curing in 3-5 minutes, knead well by hands and then fill in the gap or cavern. Applied for plugging pipes, valves, tank and body shield under 0.3 Mpa pressure.

| Package size: 114g/set | Order number: 058201 |

**TS626 Emergency Repair Putty**

Grey color. Double components, putty, high strength and good flexibility, curing in 5 minutes under normal temperature. Suitable for emergency repair of pipes and valves. (Not suitable for copper components repairing)

| Package size: 504g/set | Order number: 052801 |

**Emergency Package**

Including 6 products in the package such as pressure plugging rubber stick, oil surface emergency repair putty, fiberglass band, applying tools etc. Suitable for plugging pressure and oil on the spot. It is the necessary supplies in maintenance site.

| Package size: set | Order number: 058101 |

**Emergency Repair Box**

Delicate aluminum alloy package with code, with multi-functional repair tools and 19 frequently used TONSAN products inside. Suitable for emergency repairing, plugging, sealing on the spot. Its a masterwork for repairing in the industries such as factory, workshop, automobile transport, vessel transport and so on.

| Package size: set | Order number: 058103 |

**Emergency Repair Products**

<table>
<thead>
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<th>Product code</th>
<th>Color</th>
<th>Lowest</th>
<th>Lyne</th>
<th>Waterproof</th>
<th>Working</th>
<th>Tensile</th>
<th>Moisture</th>
<th>Temperature</th>
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<td>1.1</td>
<td>1.1</td>
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<td>3-5</td>
<td>10.9</td>
<td>13.7/13.4</td>
<td>24±2</td>
</tr>
<tr>
<td>TS626</td>
<td>Brown red</td>
<td>2.12</td>
<td>4.1</td>
<td>5.1</td>
<td>5-10</td>
<td>34.6</td>
<td>34.6</td>
<td>24±2</td>
</tr>
<tr>
<td></td>
<td>Grey</td>
<td>2.18</td>
<td>-</td>
<td>3-5</td>
<td>-</td>
<td>12.2</td>
<td>32.9</td>
<td>24±148</td>
</tr>
</tbody>
</table>

---

Physical Properties

<table>
<thead>
<tr>
<th>Product code</th>
<th>Color</th>
<th>Lowest</th>
<th>Lyne</th>
<th>Waterproof</th>
<th>Working</th>
<th>Tensile</th>
<th>Moisture</th>
<th>Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS518</td>
<td>Grey</td>
<td>1.75</td>
<td>1.1</td>
<td>1.1</td>
<td>3-5</td>
<td>68.0</td>
<td>68.0</td>
<td>23±2</td>
</tr>
<tr>
<td>TS528</td>
<td>White</td>
<td>1.99</td>
<td>1.1</td>
<td>1.1</td>
<td>3-5</td>
<td>10.9</td>
<td>13.7/13.4</td>
<td>24±2</td>
</tr>
<tr>
<td>TS626</td>
<td>Brown red</td>
<td>2.12</td>
<td>4.1</td>
<td>5.1</td>
<td>5-10</td>
<td>34.6</td>
<td>34.6</td>
<td>24±2</td>
</tr>
<tr>
<td></td>
<td>Grey</td>
<td>2.18</td>
<td>-</td>
<td>3-5</td>
<td>-</td>
<td>12.2</td>
<td>32.9</td>
<td>24±148</td>
</tr>
</tbody>
</table>

---

*Test condition: temperature (23±2°C), Relative humidity: 55%±5%.

* When the temperature is below 15 ℃, some heating measures should be adopted, or the relevant curing time should be extended

* When mix volume is more than 200g, the working time will be shorter

*** Above data is typical
High Temperature Sealing & Repairing

TONSAN High Temperature Sealing and Repairing Putties are poly materials or inorganic materials filled with ceramics and metals. Applied for sealing, repairing and bonding under high temperature.

Properties
- High temperature resistance
- High strength combination with substrates
- Stable temperature resistance for a long time, cater to high temperature working condition
- Suitable for sealing, repairing, bonding with different requirements

Physical Properties

<table>
<thead>
<tr>
<th>Product code</th>
<th>Color</th>
<th>Specific gravity (g/cm³)</th>
<th>Mix ratio (A:B)</th>
<th>Working time (min)</th>
<th>Compressive strength (MPa)</th>
<th>Shear strength (MPa)</th>
<th>Biaxial strength (MPa)</th>
<th>Curing condition</th>
<th>Temperature range (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS737</td>
<td>Grey color</td>
<td>1.51</td>
<td>2 : 1</td>
<td>100 ~ 150</td>
<td>150.0</td>
<td>20.8</td>
<td>75.0</td>
<td>Room temp. cure 2h → 100 ℃</td>
<td>60 ~ 208</td>
</tr>
<tr>
<td>TS747</td>
<td>Brownish red</td>
<td>1.07</td>
<td>20 : 1</td>
<td>150 ~ 150</td>
<td>2.0</td>
<td>-</td>
<td>-</td>
<td>Room temp. cure 3d</td>
<td>40 ~ 350</td>
</tr>
<tr>
<td>TS757</td>
<td>Greyish white</td>
<td>1.15</td>
<td>5 : 1</td>
<td>60 ~ 80</td>
<td>6.0</td>
<td>7.0</td>
<td>15.0</td>
<td>Room temp. cure 2h → 150 ℃</td>
<td>60 ~ 300</td>
</tr>
<tr>
<td>TS767</td>
<td>Greyish white</td>
<td>1.01</td>
<td>2 : 1</td>
<td>15 ~ 20</td>
<td>6.0</td>
<td>-</td>
<td>-</td>
<td>Room temp. cure 2h → Room temp. cure 2h → Room temp. cure 2h →</td>
<td>48 ~ 1200</td>
</tr>
</tbody>
</table>

Test condition: temperature 23±2 ℃; Relative humidity 50±5%
* When the temperature is below 15 ℃, some heating measures should be adopted or the relevant curing time should be extended.
** When mix volume is more than 200g, the working time will be shorter.
*** Above data is typical.
Rubber Bonding & Repairing

TONSAN Rubber Bonding and Repairing products are designed to bond conveyor belts, with good performance after curing. Curing fast at room temperature with high initial strength.

**Properties**
- Fast curing, shorten repair time
- High strength bonding
- Peeling strength higher than combination strength between rubber and fabric

**TS801** Converyor Rubber Bonder
Yellow green. Double components, high strength, good flexibility adhesive. Applied for self-adhesion or bonding between conveyor, rubber, leather. Peeling strength at bonding area is higher than combination strength between rubber and fabric.

*Package size: 550g/ set Order number: 080101*

**TS808** High Strength Rubber Bonder
Light green. Double components, excellent flexibility, high initial bonding strength, fast curing, can get high strength in wet environment. Used for conveyor fast bonding.

*Package size: 550g/ set Order number: 080801*

**TS809** High-temp Flaming Retardant Conveyor Rubber Bonder
Yellow green. Double components, flame retardant, high initial bonding strength, excellent flexibility. Applied for conveyor belt bonding, repairing and all types of rubber bonding assemblies. Peeling strength at bonding area is higher than combination strength between rubber and fabric.

*Package size: 605g/ set Order number: 080901*  
*Package size: 1.1kg/set Order number: 080905*

**TS893** Rubber Metal Bonder
Black color. Double components, excellent flexibility, high strength, using with product 1753 primer will get better effect. Mainly used for industrial roll plastic bags, and the self-adhesion of rubber, metal, leather and ceramics.

*Package size: 1100g/ set Order number: 08530205*

**TS859** Rubber Repairing Belt
With EP strengthened layer and A sulphide layer inside, good abrasion resistance and tensile strength, anti-static, suitable for longitudinal scratches, edge damage, and tear of repair for the rubber conveyor belt, and sealing of cold vulcanization for rubber conveyor belt.

*Package size: 880mmx150mmx4.3mm Order number: 08590107*

**TS868** Hot Vulcanization Core Glue For Fabric Belt
Suitable for the hot vulcanization bonding of fabric conveyor belt used in metallurgy, mine, port industries.

*Package size: 1000mmx150mmx4.95mm Order number: 08680206*

**TS913** High Strength Rubber Rebuilder

*Package size: 500g/ set Order number: 091301*

**TS921** Fast Rubber Rebuilder

*Package size: 420g/ set Order number: 092101*

**TS859** Rubber Repairing Belt
With EP strengthened layer and A sulphide layer inside, good abrasion resistance and tensile strength, anti-static, suitable for longitudinal scratches, edge damage, and tear of repair for the rubber conveyor belt, and sealing of cold vulcanization for rubber conveyor belt.

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Accessories

TONSAN Accessory products can guarantee that TONSAN engineering adhesives demonstrate their best performances, making ideal repairing, bonding, sealing, locking, rust moving and mold releasing.

Properties

- Easy to operate
- Reasonable design
- Convenient storage

1767 Silver-based Anti-seize
Silver grey, low odor, applied for anti-seizing of metal joint surfaces under high temperature, also prevent palling and corrosion of chains, fasteners, gears and shafts in vessel or oil refining areas, especially for stainless steel substrate. Operating temperature can reach to 1000°C.
Package size: 250g/bottle (brushable)  Order number: 17671

1768N Molybdenum Lubricant
Black. Paste. Molybdenum based lubricant, good extreme pressure performance, great low temperature application performance, can be used for new machine running-in lubricating and bolt lubricating.
Package size: 400mL aerosol can  Order number: 1769302

1769 Nickel-based Anti-seize
Grey color, low odor, paste-like primer contents no copper. Applied for anti-seizing, anti-palling and anti-corrosion of chains, fasteners, gears and shafts in vessels or oil refining areas, especially for stainless steel substrate. Operating temperature can reach to 900°C.
Package size: 250g/bottle  Order number: 1771601

1770 Bolt Lubricant
Package size: 400g/bottle  Order number: 1772002

1780 Gasket Cleaner
Removes residual sealant, oil, painting and dirt. No corrosion to metal. Not suitable for plastic and teflon fibre.
Package size: 400mL aerosol can  Order number: 179001
Dispensing Equipments

Together with integrate technical solutions, TONSAN also supply matching dispensing tools to increase production efficiencies, assembly reliability.

Properties
- Improve dispensing quality and efficiency
- Reduce labor intensity
- Easy operation
- High precision
Tonsan Adhesive, Inc.
Address: 5 Shuangyuan Rd. Badachu High-Tech Zone, 100041, Beijing, China
Tel: +86-10-88795588
Fax: +86-10-68865252

Tonsan Suzhou Adhesive Co., Ltd.
Address: No. 40, Youxiang Road, Wuzhong Economic Development Zone, Suzhou, China
Tel: +86-512-87775588
Fax: +86-512-66551698

www.tonsan.com

Manual No.:TSJE-01-01(Printed in 2017)
Important Notice to Purchaser: The technical parameters provided in the manual will vary with different operating conditions (temperature, humidity, material, etc.), only for reference, not as a product acceptance criteria.