THREAD SEALING | EPOXY RESIN
THREAD LOCKING | ACRYLIC RESIN
LIQUID GASKET | INSTANT CYANOACRYLATE
RETAINING | ADHESIVE
SILICONE GREASES | ACTIVATORS & PRIMERS
Anaerobic adhesive for sealing of metal thread pipe joints. Replaces PTFE tape and yarn, gives instant sealing against moderate pressure, gives elastic cured film. Lubricating effect on screwing. Low friction coefficient will assure easy assembly. Thixotropic property prevents migration from thread of the sealant before or during curing. Shocks and vibrations resistant. Easy dismantling is assured even after years. Approvals for natural gas and LP gas in vapour state USA and Canada: certified by CSA according to Requirements 4.90 and CAN/ULCS 642-M87; from -62° F to +300° F at max pressure 300 PSI (20 Bars) up to 2" pipe. Europe: according to norm EN751-1 approved by DIN-DVGW NG 5146AR0574 from -20° C to +150° C up to 2" pipe. Australia: approved AGA n.5048 up to 10 Bars and 2" pipe. Approved for potable water by DVGW according to German regulation TZW by CSA USA according to NSF 61-6.

Medium strength sealing hydraulic and pneumatics threads connectors up to 3/4" . To replace PTFE. tapes in the sealing of gases, water, LPG, hydrocarbons, oils and other chemicals. Easy to dismantle with standard tools. Highly resistant to heat, corrosion, shocks and vibrations. DIN-DVGW APPROVED FOR GAS.

Medium strength anaerobic sealant for threads connectors up to 1-1/2", suitable for copper and brass fittings assemblies. To be used in the sealing of gases, water, LPG, hydrocarbons, oils and other chemicals. Cured sealant forms elastic films highly resistant to vibrations and shocks. Retains sealant properties up to 200° C. Approved for potable water (according to Circolare Ministero della Sanità 102/78). DIN-DVGW APPROVED FOR GAS.

Anaerobic curing adhesive for the sealing of thread joints. Low screwing friction. Approved for Gas (DVGW, DIN-EN 751-1), high pressure gas and GLP (Australian Gas Association - Approval n.5048) for working pressure up to 26 Bars. Approved for use with gaseous oxygen up to 10 Bars and 60°C (BAM 1432/95 4-755). Approved for potable water (WRC). Replaces PTFE tape and yarn, gives instant sealing against moderate pressure. Seals against gas, water, LPG, hydrocarbons, oils and other chemicals. Thixotropic property prevents migration from thread of the sealant before or during curing. Shocks and vibrations resistant.

Fast curing high strenght anaerobic adhesive for locking and sealing threads and retaining of cylindrical components. Highly resistant to high temperature (up to 200°C), heat, corrosion, vibrations, water, gases, oils, hydrocarbons and many chemicals; it gives highest torque strenght on yellow brass, nickel and chrome plated brass. It meets requirements of EN 751-1 as threadsealant for gas.

### PRODUCT

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>Class of locking</th>
<th>Max. diameter of thread</th>
<th>Max. gap filling</th>
<th>Viscosity 25°C mPa.s (LT - MT - HT)</th>
<th>Color</th>
<th>Curing time</th>
<th>Locking torque Nm</th>
<th>Shear strenght N/mm²</th>
<th>Temperature range (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-10</td>
<td>1</td>
<td>2&quot;</td>
<td>0,30mm-.012&quot;</td>
<td>17000-70000 HT HT</td>
<td>White</td>
<td>20-40</td>
<td>6-11</td>
<td>4-6</td>
<td>-55+150</td>
</tr>
<tr>
<td>53-14</td>
<td>2</td>
<td>3/4&quot;</td>
<td>0,15mm-.006&quot;</td>
<td>430-630 LT</td>
<td>Brown/F*</td>
<td>10-20</td>
<td>12-18</td>
<td>8-12</td>
<td>-55+150</td>
</tr>
<tr>
<td>55-37</td>
<td>2</td>
<td>1-1/2&quot;</td>
<td>0,25mm-.010&quot;</td>
<td>2500-4500MT</td>
<td>Red/F*</td>
<td>15-30</td>
<td>18-22</td>
<td>10-14</td>
<td>-55+150</td>
</tr>
<tr>
<td>58-11</td>
<td>2</td>
<td>2&quot;</td>
<td>0,30mm-.012&quot;</td>
<td>20000-80000 HT</td>
<td>Yellow/F*</td>
<td>15-30</td>
<td>18-24</td>
<td>6-13</td>
<td>-55+150</td>
</tr>
<tr>
<td>83-50</td>
<td>3</td>
<td>3/4&quot;</td>
<td>0,20mm-.008&quot;</td>
<td>400-1000 LT</td>
<td>Green</td>
<td>5-10</td>
<td>25-35</td>
<td>25-35</td>
<td>-55+200</td>
</tr>
</tbody>
</table>

### LEGEND

CLASS OF LOCKING:
1- Low, easy to dismantle
2- Medium, possible to dismantle
3- High, permanent locking

VISCOSITY BROOKFIELD:
HT- High thixotropy
MT- Medium thixotropy
LT- Low thixotropy

LOCKING TORQUE:
Bolt M10 x 20
Quality 8,8
Nut = 0,8d

COLOR:
F* = Fluorescent under blue light

### SUGGESTED APPLICATIONS

18-10
Anaerobic adhesive for sealing of metal thread pipe joints. Replaces PTFE tape and yarn, gives instant sealing against moderate pressure, gives elastic cured film. Lubricating effect on screwing. Low friction coefficient will assure easy assembly. Thixotropic property prevents migration from thread of the sealant before or during curing. Shocks and vibrations resistant. Easy dismantling is assured even after years. Approvals for natural gas and LP gas in vapour state USA and Canada: certified by CSA according to Requirements 4.90 and CAN/ULCS 642-M87; from -62° F to +300° F at max pressure 300 PSI (20 Bars) up to 2" pipe. Europe: according to norm EN751-1 approved by DIN-DVGW NG 5146AR0574 from -20° C to +150° C up to 2" pipe. Australia: approved AGA n.5048 up to 10 Bars and 2" pipe. Approved for potable water by DVGW according to German regulation TZW by CSA USA according to NSF 61-6.

53-14
Medium strenght sealing hydraulic and pneumatics threads connectors up to 3/4". To replace PTFE. tapes in the sealing of gases, water, LPG, hydrocarbons, oils and other chemicals. Easy to dismantle with standard tools. Highly resistant to heat, corrosion, shocks and vibrations. DIN-DVGW APPROVED FOR GAS.

55-37
Medium strenght anaerobic sealant for threads connectors up to 1-1/2", suitable for copper and brass fittings assemblies. To be used in the sealing of gases, water, LPG, hydrocarbons, oils and other chemicals. Cured sealant forms elastic films highly resistant to vibrations and shocks. Retains sealant properties up to 200° C. Approved for potable water (according to Circolare Ministero della Sanità 102/78). DIN-DVGW APPROVED FOR GAS.

58-11
Anaerobic curing adhesive for the sealing of thread joints. Low screwing friction. Approved for Gas (DVGW, DIN-EN 751-1), high pressure gas and GLP (Australian Gas Association - Approval n.5048) for working pressure up to 26 Bars. Approved for use with gaseous oxygen up to 10 Bars and 60°C (BAM 1432/95 4-755). Approved for potable water (WRC). Replaces PTFE tape and yarn, gives instant sealing against moderate pressure. Seals against gas, water, LPG, hydrocarbons, oils and other chemicals. Thixotropic property prevents migration from thread of the sealant before or during curing. Shocks and vibrations resistant.

83-50
Fast curing high strenght anaerobic adhesive for locking and sealing threads and retaining of cylindrical components. Highly resistant to high temperature (up to 200°C), heat, corrosion, vibrations, water, gases, oils, hydrocarbons and many chemicals; it gives highest torque strenght on yellow brass, nickel and chrome plated brass. It meets requirements of EN 751-1 as threadsealant for gas.
For locking studs, nuts, screws and all threaded fasteners. Loosing from vibration or shock is prevented and thread corrosion is eliminated. They seal against leakage of oils, water, liquid and gas. The choice table meets right product demand on basis of requested strength and diameter or tolerance of the connections.

**SUGGESTED APPLICATIONS**

24-18  Low strenght anaerobic adhesive for thread locking of nuts, bolts and screws of all types that require to be easily dismantled. Highly resistant to heat, corrosion, vibrations, water, gases, oils, hydrocarbons and many chemicals.

54-03  Medium strenght anaerobic adhesive for thread locking of nuts and bolts of all types that require to be dismantled. Lubricating effect on screwing. Highly resistant to heat, corrosion, vibrations, water, gases, oils, hydrocarbons and many chemicals.

55-03  Medium strenght anaerobic adhesive for thread locking of nuts and bolts of all types that require to be dismantled. Lubricating effect on screwing. Suitable to be used on oily surfaces. Highly resistant to heat, corrosion, vibrations, water, gases, oils, hydrocarbons and many chemicals. Approved for potable water (KTW - DVGW). Approved for gas (DVGW nr. NG-5146AU0399) European norm EN 751-1.

55-04  Medium viscosity anaerobic adhesive for thread locking of large diameter studs, nuts and bolts of all types that require to be dismantled. Highly resistant to heat, corrosion, vibrations, water, gases, oils, hydrocarbons and many chemicals.

70-14  Low viscosity and high capillary action for locking and sealing threaded fasteners and close fittings parts after assembly, also to penetrate and seal metal porosity in moulds and castings. Medium to high strenght locking. Highly resistant to heat, corrosion, vibrations, water, gases, oils, hydrocarbons and many chemicals.

83-54  High strenght anaerobic adhesive for locking and sealing of studs, nuts, bolts and threaded fasteners not requiring dismantling. High torque strenght. Highly resistant to heat, corrosion, vibrations, water, gases, oils, hydrocarbons and many chemicals.

83-55  High strenght anaerobic adhesive for locking and sealing of studs, nuts, bolts and threaded fasteners not requiring dismantling. Highly resistant to heat, corrosion, vibrations, water, gases, oils, hydrocarbons and many chemicals. Specially formulated for oily surfaces.

86-72  Very high temperature resistant (+230°C), high strenght anaerobic adhesive for locking and sealing thread connections and fitted parts. High viscosity and thixotropic effect allows larger tolerances. Highly resistant to corrosion, vibrations, water, gases, oils, hydrocarbons and many chemicals. DIN DVGW approved thread sealant for gas (according to DIN EN 751-1 Reg. Nr. NG - 5146AT0264).
GASKETING

For sealing of flat mating surfaces and flange joints of pumps, gearboxes, camshafts blocks, motor flanges. They replace pre-formed gaskets, allow greater machining tolerances, assure metal to metal contacting and dismantling with normal tools. They cure to flexible and/or elastic gaskets, resistant to vibrations, heat, oils and industrial fluids. The choice table meets right product demand on basis of requested strenght and diameter or tolerance of connections.

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>Class of locking</th>
<th>Max. gap filling</th>
<th>Viscosity 25°C mPa.s (MT-HT)</th>
<th>Color</th>
<th>Curing time</th>
<th>Adhesive strenght</th>
<th>Temperature range (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>handling (minutes)</td>
<td>shear ISO 10123 N/mm2</td>
<td>tensile ISO 6922 N/mm2</td>
</tr>
<tr>
<td>28-10</td>
<td>1</td>
<td>0,30mm -.012&quot;</td>
<td>17-60 HT</td>
<td>Green/F*</td>
<td>20-40</td>
<td>3-6</td>
<td>4-6</td>
</tr>
<tr>
<td>59-30</td>
<td>1</td>
<td>3 mm -.120&quot;</td>
<td>Pâte</td>
<td>Red</td>
<td>60-120</td>
<td>2-4</td>
<td>----</td>
</tr>
<tr>
<td>58-14</td>
<td>2</td>
<td>0,50mm -.020&quot;</td>
<td>28-100 HT</td>
<td>Orange/F*</td>
<td>15-30</td>
<td>3-6</td>
<td>5-10</td>
</tr>
<tr>
<td>58-31</td>
<td>2</td>
<td>0,50mm -.020&quot;</td>
<td>70-600 HT</td>
<td>Red/F*</td>
<td>10-20</td>
<td>1-3</td>
<td>8-13</td>
</tr>
<tr>
<td>59-10</td>
<td>2</td>
<td>0,50mm -.020&quot;</td>
<td>50-300 HT</td>
<td>Red/F*</td>
<td>15-30</td>
<td>3-6</td>
<td>5-10</td>
</tr>
</tbody>
</table>

LEGEND

CLASS OF LOCKING:
1- Low, easy to dismantle
2- Medium, possible to dismantle
3- High, permanent locking

VISCOSITY BROOKFIELD:
HT- High thixotropy
MT- Medium thixotropy
LT- Low thixotropy

LOCKING TORQUE:
Bolt M10 x 20
Nut = 0,8d

COLOR:
F* = Fluorescent under blue light

SUGGESTED APPLICATIONS

58-14 Anaerobic curing adhesive for the gasketing and sealing of flexible flanges, precise joints. Replaces solid gaskets, gives elastic cured films. Seals against gases, water, LPG, hydrocarbons, oils and other chemicals. Thirotropic property prevents migration of the sealant before or during curing. Shocks and vibrations resistant.

58-31 Anaerobic curing adhesive for the gasketing and sealing flanges and small to medium size gear boxes. Replaces solid gaskets, gives flexible cured films and seals against gases, water, LPG, hydrocarbons, oils and other chemicals. Thirotropic property prevents migration of the sealant before or during curing. Shocks and vibrations resistant.

28-10 Heavy duty anaerobic curing adhesive for sealing of flat mating surfaces and flange joints of pumps, gearboxes, camshafts blocks, motor flanges. Replaces pre-formed gaskets, allows greater machining tolerances, assures metal to metal contacting and dismantling with normal tools. Highly resistant to vibrations, heat, water, gases, LPG, oils, hydrocarbons and many chemicals.

59-10 One-component moisture silicon based sealant and adhesive, releasing non corrosive and odorless by-products. Provides an extremely flexible gasket between surfaces made of various materials (metals, plastics, glass, ceramics). Suitable for sealing gear boxes, pumps and motor flanges, oil and water containers, air forced pipes. Highly resistant to oils. Resistant to vibrations, thermal shocks, pressurized air, water, gases, LPG and several chemicals. Sealed parts can be disassembled using normal tools.

59-30 High temperature one-component moisture curing acetic silicon sealant by reaction. Suitable for sealing gear boxes, pumps, motor and compressor flanges, hot fluid pipes. Provides an extremely flexible gasket between surfaces and resists to vibrations, thermal shocks, water, gases, LPG, oils and several chemicals. Keeps its sealing properties within temperatures of -60° and +275°C with peaks up to 350°C. Sealed parts can be disassembled using normal tools.
To fit bearings, bushes, pulleys, gears, keys, splines and other cylindrical components.
They strengthen press fitted parts, allow the use of sliding fits in place of interference fits, allow larger machining tolerances, eliminate distortions, fretting corrosion and improve reliability. They seal against liquids leakage. The choice table meets right product demand on basis of requested strenght and diameter or tolerance of connections.

### SUGGESTED APPLICATIONS

<table>
<thead>
<tr>
<th>Product</th>
<th>Class of locking</th>
<th>Max. gap filling</th>
<th>Viscosity 25°C mPa.s (MT - HT)</th>
<th>Color</th>
<th>Curing time (min)</th>
<th>Locking Torque (ISO 10964) N.m</th>
<th>Shear strength (ISO 10123) N/mm²</th>
<th>Temperature range (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>53-11</td>
<td>2</td>
<td>25/32&quot;</td>
<td>400-650 MT</td>
<td>Yellow/F*</td>
<td>10-20</td>
<td>12-15</td>
<td>8-12</td>
<td>-55+150</td>
</tr>
<tr>
<td>82-33</td>
<td>3</td>
<td>15/32&quot;</td>
<td>120-180 LT</td>
<td>Green/F*</td>
<td>5-10</td>
<td>25-30</td>
<td>17-22</td>
<td>-55+150</td>
</tr>
<tr>
<td>83-21</td>
<td>3</td>
<td>25/32&quot;</td>
<td>400-600 LT</td>
<td>Green/F*</td>
<td>1-18</td>
<td>30-35</td>
<td>25-35</td>
<td>-55+175</td>
</tr>
<tr>
<td>86-86</td>
<td>3</td>
<td>M56-2-1/16&quot;</td>
<td>5000-35000 MT</td>
<td>Green/F*</td>
<td>20-40</td>
<td>25-30</td>
<td>10-20</td>
<td>-55+230</td>
</tr>
<tr>
<td>89-51</td>
<td>3</td>
<td>2&quot;</td>
<td>6000-72000 MT</td>
<td>Metal</td>
<td>15-30</td>
<td>40-45</td>
<td>25-30</td>
<td>-55+150</td>
</tr>
</tbody>
</table>

### LEGEND

- **CLASS OF LOCKING:**
  1. Low, easy to dismantle
  2. Medium, possible to dismantle
  3. High, permanent locking

- **VISCOSITY BROOKFIELD:**
  - HT - High thixotropy
  - MT - Medium thixotropy
  - LT - Low thixotropy

- **LOCKING TORQUE:**
  - Bolt M10 x 20 Quality 8.8
  - Nut = 0.8d

- **COLOR:**
  - F* = Fluorescent under blue light

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- **53-11** Medium strenght anaerobic adhesive for retaining of bearings, liners, bushes, keys and splines. Highly resistant to heat, corrosion, vibrations, water, gases, oils, hydrocarbons and many chemicals.

- **82-33** High strenght anaerobic adhesive for retaining of close fitted parts, shafts, bushes, pulleys, rotors, especially suitable to be used on oily surfaces as is. Highly resistant to heat, corrosion, vibrations, water, gases, oils, hydrocarbons and many chemicals.

- **83-21** Fast curing high strenght anaerobic adhesive for locking and sealing threads, fitted parts and retaining of cylindrical components. Highly resistant to heat, corrosion, vibrations, water, gases, oils, hydrocarbons and many chemicals. Approved as sealant in oxygen valves and fitting up to 60°C and 20 Bars by BAM Berlin.

- **85-21** Fast curing high strenght anaerobic adhesive for locking and sealing threads and retaining of cylindrical parts. Allows larger machining tolerances. Maximum strenght retaining. Highly resistant to heat, corrosion, vibrations, water, gases, oils, hydrocarbons and many chemicals.

- **86-86** High strenght anaerobic adhesive for locking and sealing thread connections and fitted parts. Highly resistant to heat, corrosion, vibrations, water, gases, oils, hydrocarbons and many chemicals. Tixotropic effect large tolerance and gap filling.

- **89-51** High viscosity gap filling silver paste used between machinery parts to repair worn areas and restore correct fits. Repairs worn shaft and housing, bearing spinouts, wallowed keyways and splines, threaded parts. Highly resistant to heat, vibrations, corrosion, water, gases, oil, hydrocarbons and many chemicals.
STANT CYANOACRYLATE ADHESIVES

SUGGESTED APPLICATIONS

14 General purpose - for metal to metal, metal to rubber, plastics and hard materials.

23 General purpose - rubber, plastics and ceramics.

41 Fast setting - excellent with difficult rubber, foam, EPDM rubber and soft plastics.

32 Low viscosity, fast setting on acidic and porous surfaces and difficult rubber.

43 High resistance on wood, leather, fabrics, ceramics and metal.

43S High resistance on wood, leather, fabrics, ceramics and metal. Operating temperature: Up to 120°C

47 Gel, no drip, no run - vertical applications. Operating temperature: Up to 120°C

63 Low viscosity, no odor, no blooming effect - polycarbonate.

PHYSICAL PROPERTIES

- Flash point ISO 2592: 87°C
- Operating temperature: -50°C to +80°C
- Softening range: 160 / 170°C
- Refractive index n20D: similar to glass
- Electrical resistivity DIN 53482 (Ω.mm): > 10^15
- Dielectric Strenght ASTM 149 (KV/mm): 25
- Dielectric constant DIN 53483 (1 Mhz): 5.2

<table>
<thead>
<tr>
<th>GRADE</th>
<th>Chemical composition</th>
<th>Specific gravity</th>
<th>Viscosity (20°C mPa.s)</th>
<th>Gap filling (microns)</th>
<th>Speed of cure*</th>
<th>Tensile strenght ISO 6922 N/mm2</th>
<th>Shear strenght ISO 4587 N/mm2</th>
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</thead>
<tbody>
<tr>
<td>IST 14</td>
<td>Methyl</td>
<td>1.10</td>
<td>80-150</td>
<td>10-100</td>
<td>2</td>
<td>25-35</td>
<td>20-25</td>
</tr>
<tr>
<td>IST 23</td>
<td>Ethyl</td>
<td>1.06</td>
<td>40-80</td>
<td>10-60</td>
<td>3</td>
<td>12-25</td>
<td>13-18</td>
</tr>
<tr>
<td>IST 32</td>
<td>Ethyl</td>
<td>1.10</td>
<td>5-10</td>
<td>10-40</td>
<td>5</td>
<td>18-25</td>
<td>13-18</td>
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<tr>
<td>IST 41</td>
<td>Ethyl modified</td>
<td>1.10</td>
<td>5-10</td>
<td>10-40</td>
<td>5</td>
<td>12-25</td>
<td>13-18</td>
</tr>
<tr>
<td>IST 43</td>
<td>Ethyl</td>
<td>1.10</td>
<td>80-150</td>
<td>10-150</td>
<td>4</td>
<td>22-25</td>
<td>15-20</td>
</tr>
<tr>
<td>IST 43S</td>
<td>Ethyl modified</td>
<td>1.06</td>
<td>80-150</td>
<td>10-150</td>
<td>----</td>
<td>15-25</td>
<td>15-20</td>
</tr>
<tr>
<td>IST 47</td>
<td>Ethyl/Gel</td>
<td>1.08</td>
<td>GEL</td>
<td>10-300</td>
<td>2</td>
<td>18-25</td>
<td>13-18</td>
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<tr>
<td>IST 63</td>
<td>Alcoxy-Ethyl</td>
<td>1.07</td>
<td>80-150</td>
<td>10-150</td>
<td>1</td>
<td>10-25</td>
<td>12-22</td>
</tr>
</tbody>
</table>

* Relative setting time: (5 = highest speed, 1 = lowest speed)
ACTIVATORS AND SURFACE CONDITIONERS FOR ANAEROBIC ADHESIVES

The activators are specially designed products to speed up the cure of Anaerobic Adhesives within few minutes. Typical conditions of use are low temperature, large gaps, inactive or passivates surfaces.

PRODUCT:

Activator 11
Liquid solvent base formulated accelerator.
Fixing time: about 1 minute

Cleaner 10
Fast drying cleaner and degreaser to optimally prepare the surfaces to be bonded. Suitable for metal, glass, ceramic, rubber and plastic.

HOW TO USE:

Apply on one of the two surfaces, wait for evaporation for few seconds. The treated surface remain active but assembling must be made seconds after the application of the Anaerobic Adhesive.

ACTIVATORS, PRIMERS AND SURFACE CONDITIONERS FOR CYANOACRYLATE INSTANT ADHESIVES

HOW TO USE:

Apply on one of the two surfaces, wait for evaporation for few seconds. The treated surface remain active but assembling must be made seconds after the application of the Anaerobic Adhesive.

PRODUCT:

Activator 7
Solvent based primer which allows bonding of polyolefin plastics (polyethylene, polypropylene), thermoplastic rubbers, EPDM, PTFE, silicones and other difficult to bond surfaces.

Activator 9
Liquid primer for instant curing of Cyanoacrylate adhesives on porous or acidic surfaces. Eliminates the blooming effect. To be used as primer or as post-curing after excess adhesive. Available as liquid formulation or aerosol.

Activator AT4512
Liquid primer for instant curing of cyanoacrylate adhesives on porous or acidic surfaces. Eliminates the blooming effect. To be used as primer or as post-curing after assembling, to cure instantly the excess of adhesive.

Cleaner 10
Fast drying cleaner and degreaser to optimally prepare the surfaces to be bonded. Suitable for metal, glass, ceramic, rubber and plastic. Available as aerosol.

Remover CA
Solvent blend which can be used to remove cured cyanoacrylate adhesive from surfaces, clothing or to be debond parts assembled with cyanoacrylate adhesives.

KOMBILOX

10 ML OF INSTANT CYANOACRYLATE ADHESIVE + 10 ML OF REINFORCING

The reinforcing is used in combination with the instant adhesive for bonding, repairing and filling large gaps, cracks and hole.

It is a free flowing powder. It is usually poured on the liquid excess of adhesive, is readily absorbed and cures quickly, increasing the bond strength and the thickness of the cured adhesive film.
PHYSICAL PROPERTIES

Chemical Composition: Acrylic resin
Temperature range: -30°C to +120°C
Thermal conductivity (W/mK): 0,1
Coefficient of thermal expansion (1/K): 80 - 120 x 10^-6
Dielectric Strength: 4,6 (1MHz)

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>Color</th>
<th>Viscosity 25°C mPa</th>
<th>Gap filling (mm)</th>
<th>Handling (minutes)</th>
<th>Functional (minutes)</th>
<th>Shear strength ASTM 1002 N/mm²</th>
<th>Traction ISO 3699 N/mm²</th>
<th>Choc ASTM D 950 KJ/mm²</th>
</tr>
</thead>
<tbody>
<tr>
<td>33-00 + Act.20</td>
<td>Amber</td>
<td>45000-800000</td>
<td>0,05-1</td>
<td>1-20</td>
<td>30-60</td>
<td>15-25</td>
<td>15-25</td>
<td>15-25</td>
</tr>
<tr>
<td>33-47 A+B</td>
<td>Amber</td>
<td>5000-12000</td>
<td>0,05-1</td>
<td>1-3</td>
<td>30-60</td>
<td>15-25</td>
<td>15-25</td>
<td>15-25</td>
</tr>
</tbody>
</table>

SUGGESTED APPLICATIONS

33-00 + Act.20  Two-component curing structural adhesive by contact, does not require mixing. Bonds metals, plastics, ceramics, woods. Adhesive is applied to one surface and Activator to the other, press together and fixing is achieved within few minutes. No wasted material, maximum of reproducibly. High impact resistance, good peel and tensile strength, best resistance against gasoline, lubricants, water, heat resistance up to 120°C. Low irritating, low odor, free of acrylic esters and solvents, not flammable.

33-47 A+B  Two-component adhesive curing by contact, does not require mixing. Fixing time from 1 to 3 minutes. Suitable for bonding ferrite, metals, ceramics, glass, wood, hard plastics, highly resistant to impact, peeling and tensile.
TWO PART EPOXY ADHESIVE

PHYSICAL PROPERTIES
- Chemical composition: Epoxy resin
- Specific gravity: 1.1 - 1.2 g/cc
- Temperature range: -40°C + 80°C
- Thermal conductivity (W/mK): 0.1
- Coefficient of thermal (1/K): 60 - 210 x 10⁻⁶
- Dielectric strenght (Kv/mm): 520-860
- Volumetric resistivity (Ω . cm): 3.5 - 5 x 10¹²

PRODUCT | Characteristics | Color | Viscosity 25°C Pa.s | Handling time (minutes) | Curing time | Adhesive strenght | Shear strenght (ASTM D1002) N/mm² | Peel strenght (ISO 4578) N/mm²
--- | --- | --- | --- | --- | --- | --- | --- |
31-40 | Fast curing | Colourless | 12-25 | 90-150 mins | 40 - 60 min. | 10 - 12 | 40-20 |
31-42 | Fast curing | Colourless | 12-18 15-30 | 5-10 | 20-30 min | 10-12 | 40-20 |
34-15 | very flexible | Ivory | 20-35 20-50 | 25-35 | 12-24 hrs | 8-12 | 40-70 |
35-44 | tough | Colourless | 10-20 14-24 | 10-25 | 40-60 min | 14-18 | 25-60 |
36-10 | tough/flexible | Ivory | 14-28 10-25 | 90-150 | 4-8 heures | 12-18 | 25-40 |

SUGGESTED APPLICATIONS

DESCRIPTION

31-40 Multipurpose, clear, non yellowing structural adhesive, 20 minutes setting time. Recommended for structural bonding of many materials: metals, ferrite, ceramic, marble, glass, concrete, wood and some plastics (polyester, ABS, rigid PVC). Not suitable for soft materials, polyethylene, polypropylene and teflon. Resistant to water, gasoline and oils.

31-42 Multipurpose, clear, non yellowing structural adhesive, 5 minutes setting time. Recommended for structural bonding of many materials: metals, ferrite, ceramic, marble, glass, concrete, wood and some plastics (polyester, ABS, rigid PVC). Not suitable for rubber, soft materials, polyethylene, polypropylene and teflon. Resistant to water, gasoline and oils.

34-15 Highly flexible structural adhesive with improved peeling adhesion and shock resistance, 30 minutes setting time. Recommended for bonding of many materials: metals, ferrite, ceramic, marble, glass, concrete, wood and some plastics (polyester, ABS, polycarbonate). Not indicated for polythene, PTFE and silicon. Resistant to water, gasoline and oils.

35-44 Multipurpose, clear structural adhesive, with improved adhesion, 20 minutes setting time. Recommended for structural bonding of many materials: metals, ferrite, ceramic, marble, glass, concrete, wood and some plastics (polyester, ABS, rigid PVC). Not suitable for soft materials, polyethylene, polypropylene and teflon. Resistant to water, gasoline and oils.

36-10 Multipurpose, transparent structural adhesive, 60 minutes setting time. Recommended for structural bonding of many materials: metals, ferrite, ceramic, marble, glass, concrete, wood and some plastics (polyester, ABS, rigid PVC). Not indicated for rubber, soft materials, polyethylene, polypropylene and teflon. Resistant to water, gasoline and oils.
**SILICON GREASE WITH TEFLON Nr 4**

Combines the slip properties of silicon with the lubricating power of PTFE. Suitable for metal/plastic, metal/rubber, plastic/plastic and in some cases metal/metal combinations. It is not toxic, odorless and tasteless, allowed to use with potable water. Does not allow growth of fungus and moulds even in high humidity and temperature conditions. It is not flammable and has good electrical insulation properties.

**SILICON GREASE Nr 9**

Provides lubricants properties for metal/plastic, metal/rubber and plastic/plastic combinations, also suitable for metal/metal not subjected to high loads. It is not toxic, odorless, tasteless, allowed to use with potable water. Does not allow growth of fungus and moulds even in high humidity conditions. It is not flammable and has good electrical insulation properties.

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>Appearance</th>
<th>Dielectric resistivity (CEI 243)</th>
<th>Consistency NLGI</th>
<th>Temperature range (°C)</th>
<th>Drop point (°C)</th>
<th>Flash point (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No 4</td>
<td>White trans. paste</td>
<td>20</td>
<td>2-3</td>
<td>-40+200</td>
<td>more 200 °C</td>
<td>more 300 °C</td>
</tr>
<tr>
<td>No 9</td>
<td>Translucent paste</td>
<td>20</td>
<td>2-3</td>
<td>-40+200</td>
<td>more 200 °C</td>
<td>more 300 °C</td>
</tr>
</tbody>
</table>