**Instrument Cleaning**

All instruments need to be cleaned and thoroughly dried before they are sterilized. They should be washed with a non-corrosive, low sudsing neutral detergent. Instrument cleaning can be accomplished by ultrasonic or automated cleaning, which is preferred to minimize the opportunity of sharps injuries due to hand scrubbing. Salvin Dental does not suggest the use of any abrasive brushes or materials to clean instruments.

**Instrument Sterilization**

There are three common methods of heat sterilization used in dental offices (steam autoclave, chemical vapor, and dry heat).

<table>
<thead>
<tr>
<th>Method</th>
<th>Conditions/Notes</th>
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| **Steam Autoclave Method**    | • 4+ Minutes At 270°F / 132°C (15psl)  
• Do Not Use Closed Containers  
• May Damage Plastic And Rubber Items  
• Non-Stainless Steel Metal Items Corrode  
• Use Of Hard Water May Leave Deposits  
• Dry Instruments at Least 10 Minutes |
| **Unsaturated Chemical Vapor**| • 20 Minutes At 270°F / 132°C (20-40psi)  
• Do Not Use Closed Containers  
• May Damage Plastic And Rubber Items  
• Use Special Solution  
• Dry Instruments Or Dip In Special Solution  
• Provide Adequate Ventilation       |
| **Dry Heat Oven**             | • 60-120 Minutes At 320°F / 160°C  
• May Damage Plastic And Rubber Items  
• Do Not Open Door Before End Of Cycle  
• Dry Instruments                      |
| **Rapid Dry Heat Transfer**   | • 12 Minutes At 350°F / 177°C (For Wrapped Items)  
• 6 Minutes At 350°F / 177°C (For Unwrapped Items)  
• May Damage Plastic And Rubber Items  
• Do Not Open Door Before End Of Cycle  
• Dry Instruments                      |

**Stainless Steel Instruments**

While stainless steel has superior corrosion resistance, it will discolor and corrode when exposed to higher than recommended chemical concentrations or certain chemicals. Stainless steel should not be exposed to the following chemicals: Sodium Hypochlorite (household bleach), Tartaric Acid (stain and tartar remover), Aluminum Chloride, Barium Chloride, Bichloride of Mercury, Calcium Chloride, Carbolic Acid, Chlorinated Lime, Citri Acid, Dakin’s Solution, Ferrous Chloride, Lysol, Mercuric Chloride, Mercury Salts, Phenol, Potassium Permanganate, Potassium Thiocyanate or Stannous Chloride. The following chemicals should NEVER be used with stainless steel: Aqua Regia, Ferric Chloride, Sulfuric Acid, Hydrochloric Acid or Iodine.

**Hinged Instruments**

All hinged Instruments (Forceps, Rongeurs, Scissors, Needle Holders, Hemostats, etc) should be kept lubricated. Regular use of proper lubricants and instrument lubricant spray will prevent rust, corrosion and stiff joints and will ensure smooth operation. (Household lubricants and handpiece lubricants are NOT recommended) All hinged instruments should be sterilized in the open position.

**Anodized Aluminum Contrasters**

Special care needs to be exercised in cleaning and sterilizing coated aluminum instruments. Do not clean in an ultrasonic unit. Clean by hand or in some automated washers. Check processing product labels for caution about use with aluminum. Sterilize in autoclave, chemclave or dry heat under 350 F (177°C) according to manufacturer’s instructions. Note: Anodized aluminum instruments, when sterilized with stainless steel instruments, may cause an adverse chemical reaction.