



USE AND HANDLING INSTRUCTIONS

Greenwald Catalog Items:

CET Series Cystoscopic Electrodes
EET Series Flexible Endoscopic Electrodes

1. Cleanse product in a suitable surgical cleanser. Charred tissue on the instrument tip can be removed by using an abrasive pad or stiff brush and scouring powder.
2. Rinse thoroughly.
3. Maximum product life is achieved by using ethylene oxide gas (EtO) sterilization. Follow sterilizer manufacturer’s recommended parameters.
4. Cold soaking in sterilizing solutions is an acceptable alternate method. Because some sterilizing solutions contain penetrants, double rinsing with agitation is recommended.
5. Autoclaving is another acceptable method. **Check shaft insulation to be sure that no length shrinkage occurred.**
6. Regardless of sterilizing method employed, product should be thoroughly dried prior to use. Particular attention should be paid to the power cord connector.
7. TIP MUST BE FULLY SUBMERSED IN IRRIGATING FLUID AND IN CONTACT WITH TISSUE WHEN ELECTRICAL CURRENT IS EMPLOYED. Do not exceed the electro- surgical generator settings for the following electrodes:

Device	Cut Mode	Blend 1 Cut	Coagulation Mode	Blend 1 Coagulation Mode
2 FR EET Electrodes	170 Watts	130 Watts	45 Watts	-
3 FR EET & CET Electrodes	185 Watts	130 Watts	85 Watts	50 Watts
4 FR EET & CET Electrodes	205 Watts	170 Watts	90 Watts	-

Caution: Federal (U.S.A.) Law restricts this device to sale/use by or on the order of a physician.

Greenwald Surgical Company, Inc. (A Division of Grace Manufacturing, Inc.)

Manufacturers of Urological and Electrosurgical Instruments and Accessories

614 SR 247 • Russellville, Arkansas 72802 • (479) 968-5455

Toll Free: 1-866-968-6665



**RECOMMENDED STERILIZATION PARAMETERS for
EO Sterilization in a Health Care Facility**

Unless otherwise stated, our products are **not sterile** and must be thoroughly cleaned and sterilized prior to each use.

Parameters for EO Sterilization Cycles					
Process	Concentration	Exposure time at 37°C (99°F)	Exposure time at 38°C (100°F)	Exposure time at 55°C (130°F)	Relative Humidity
100% EO	880 mg/L	4 hrs	-	1 hr	50% to 80%
	740 mg/L	-	4 hrs, 30 min	1 hr	80%
	735 mg/L	4 hrs	-	1 hr	50% to 80%
	725 mg/L	3 hrs	-	1 hr	30% to 80%
EO-HCFC	600mg/L	-	6 hrs	2 hrs, 10 min	30% to 70%
	570 to 620 mg/L	-	5 hrs	2 hrs	≥30%
EO-carbon dioxide	360 to 390 mg/L	-	7 hrs, 30 min	3 hrs	≥30%
	450 mg/L	-	7 hrs, 30 min	3 hrs	30% to 80%

Always make sure the product is in good condition and perfect working order before reusing it.

Sterilization equipment manufacturer’s recommendations must be followed. Health care facility protocol should be adhered to.

Since Greenwald Surgical Co., Inc. (a division of Grace Manufacturing, Inc.) is not familiar with individual hospital procedures, cleaning methods, bio-burden levels, and other conditions, Grace Manufacturing, Inc. assumes no responsibility for sterilization of product even if the general above guidelines are followed.

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**RECOMMENDED STERILIZATION PARAMETERS for
Gravity-Displacement Steam Sterilization in a Health Care Facility**

Unless otherwise stated, our products are **not sterile** and must be thoroughly cleaned and sterilized prior to each use.

Do not exceed a temperature of 138°C (280°F).

Parameters for Gravity-Displacement Steam Sterilization Cycles			
Item	Exposure time at 121°C (250°F)	Exposure time at 132°C (270°F)	Drying Time
Wrapped Instruments	30 minutes	15 minutes	15 to 30 minutes
Unwrapped nonporous items	-	3 minutes	0 to 1 minute
Unwrapped nonporous items in mixed load	-	10 minutes	0 to 1 minute

It is important that the longest drying cycle possible is employed to prevent build up of moisture inside the instrument. If the cycle of your autoclave allows a 30 minute drying time, we recommend using it.

Always make sure the product is in good condition and perfect working order before reusing it.

Sterilization equipment manufacturer’s recommendations must be followed. Health care facility protocol should be adhered to.

Since Greenwald Surgical Co., Inc. (a division of Grace Manufacturing, Inc.) is not familiar with individual hospital procedures, cleaning methods, bio-burden levels, and other conditions, Grace Manufacturing, Inc. assumes no responsibility for sterilization of product even if the general above guidelines are followed.

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**RECOMMENDED STERILIZATION PARAMETERS for
Dynamic Air Removal (Prevacuum) Steam Sterilization in a Health Care Facility**

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Do not exceed a temperature of 138°C (280°F).

Parameters for Dynamic Air Removal Steam Sterilization Cycles			
Item	Exposure time at 132°C (270°F)	Exposure time at 135°C (275°F)	Drying Time
Wrapped Instruments	4 minutes	-	20 to 30 minutes
Unwrapped nonporous items	3 minutes	3 minutes	N/A
Unwrapped nonporous items in mixed load	4 minutes	3 minutes	N/A

It is important that the longest drying cycle possible is employed to prevent build up of moisture inside the instrument. If the cycle of your autoclave allows a 30-minute drying time, we recommend using it.

Always make sure the product is in good condition and perfect working order before reusing it.

Sterilization equipment manufacturer’s recommendations must be followed. Health care facility protocol should be adhered to.

Since Greenwald Surgical Co., Inc. (a division of Grace Manufacturing, Inc.) is not familiar with individual hospital procedures, cleaning methods, bio-burden levels, and other conditions, Grace Manufacturing, Inc. assumes no responsibility for sterilization of product even if the general above guidelines are followed.

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**RECOMMENDED STERILIZATION PARAMETERS for
Liquid Chemical Steam Sterilization in a Health Care Facility**

Unless otherwise stated, our products are **not sterile** and must be thoroughly cleaned and sterilized prior to each use.

Do not exceed a temperature of 138°C (280°F).

Parameters for Liquid Chemical Sterilization Cycles			
Formulation	Exposure time at 20°C (68°F)	Exposure time at 25°C (77°F)	Exposure time at 50°C to 55.5°C (122°F to 132°F)
2% to 3.5% glutaraldehyde	-	10 hours	-
7.5% hydrogen peroxide	6 hours	-	-
0.2% peracetic acid	-	-	12 minutes
It cannot be assumed that all 2% to 3.5% glutaraldehyde formulations are sterilants. The efficacy of glutaraldehyde sterilants depends on the active ingredients, the inactive ingredients, and the pH. Check the product label to confirm the parameters.			

Always make sure the product is completely dry before reusing it.

Always make sure the product is in good condition and perfect working order before reusing it.

Liquid chemical sterilization manufacturer’s recommendations must be followed. Health care facility protocol should be adhered to.

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