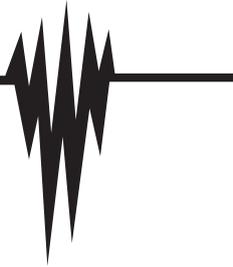


LUMISCOPE®

For The Quality Of Life®



Portable Ultrasonic Nebulizer Model 6700 User Manual

Read this manual before operating the nebulizer. Save this manual for future reference.

⚠ Federal Law (USA) restricts this device to sale by or on the order of a physician. This device should not be used unless the operator has been instructed by a qualified healthcare professional.

Contents

English	Page 3
Español	Page 21

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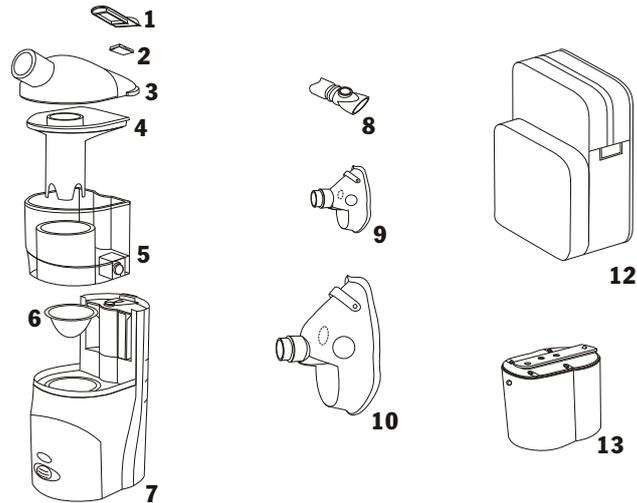
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CONTENTS

6700 PARTS.....	4
OPERATION & INDICATION	4
INTRODUCTION.....	5
IMPORTANT: BEFORE USE, READ THE INSTRUCTIONS CAREFULLY. USE THIS DEVICE ONLY AS INDICATED.	5
IMPORTANT SAFETY PRECAUTIONS	5
SETUP.....	8
METHOD OF POWERING	10
OPERATION	12
MAINTENANCE	13
STORAGE.....	16
SAFETY PROTECTIONS	16
6700 TECHNICAL SPECIFICATIONS.....	17
ACCESSORIES INCLUDED	17
LIMITED WARRANTY	18

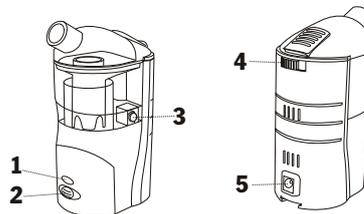
6700 PARTS

- 1) Air Filter Holder
- 2) Air Filter
- 3) Top Cover
- 4) Nebulization Chamber
- 5) Air Flow Chamber
- 6) Medication Cup
- 7) Main Device
- 8) Mouthpiece
- 9) Pediatric Mask
- 10) Adult Mask
- 11) AC/DC Adapter (not shown)
- 12) Carrying Bag
- 13) Optional: Rechargeable Battery
- 14) Optional: Car Adapter (Cigarette Lighter) (not shown)



OPERATION & INDICATION

- 1) Power Indicator Light
- 2) On/Off Button
- 3) Air-Flow Chamber Locking Knob
- 4) Flow Rate Controller
- 5) AC/DC Power Socket



INTRODUCTION

Thank you for choosing the Lumiscope 6700 portable ultrasonic nebulizer for aerosol therapy. The 6700 is designed and manufactured according to the most advanced technology. It is also characterized by a high operation speed (up to .7ml/minute) and is extremely quiet (noise level below 40dB). The 6700 ultrasonic nebulizer is equipped with a two-valve system which ensures maximum efficiency of inhalation, reducing any medication waste to the minimum.

Intended use

The 6700 is designed to be used by an adult or pediatric patient, under a physician's prescription, to produce medicated aerosols for inhalation therapy. Indications for therapy include asthma, chronic bronchitis, infection of the upper respiratory tract, chronic obstructive pulmonary disease, and other respiratory disorders in accordance with a physician's prescription. Do not use this product for any other purpose than the preceding.

IMPORTANT: BEFORE USE, READ THE INSTRUCTIONS CAREFULLY. USE THIS DEVICE ONLY AS INDICATED.

IMPORTANT SAFETY PRECAUTIONS

When using electrical products, especially when children are present, always follow basic safety precautions, including the following:

-  **DANGER:** Indicates a potential hazard situation or unsafe practice that, if not avoided, will result in death or serious personal injury.
-  **WARNING:** Indicates a potential hazard situation or unsafe practice that, if not avoided, could result in death or serious personal injury.
-  **CAUTION:** Indicates a potential hazard or unsafe practice that, if not avoided, could result in minor or moderate personal injury.
-  **NOTICE:** Indicates a potential hazard or unsafe practice that, if not avoided, could result in product or property damage.

Info: Provides application recommendations or other useful information to ensure that you get the most from your product.

⚠ DANGER: To reduce the risk of electrocution:

- 1. Always unplug this product immediately after use.**
- 2. Do not use this product while bathing, showering, washing dishes, or close to water sources of any kind.**
- 3. Do not place or store device where it can fall or be pulled into a tub or sink.**
- 4. Do not place device in or drop into water or other liquid.**
- 5. Do not reach for a device that has fallen into water. Unplug it immediately.**

⚠ WARNING: To reduce the risk of burns, electrocution, fire or personal injury:

- 1. Never leave this device unattended when plugged in.**
- 2. This product contains small parts that may present a choking hazard to small children. Always use close supervision when this device is used by or near children or those who require close supervision.**
- 3. Children under the age of 3, or any patient who is unable to use a mouthpiece properly under supervision, should use a mask.**
- 4. Use this device only as intended and described in this manual. Do not use attachments or accessories not recommended by GF Health Products, Inc.**
- 5. Never operate this product if:**
 - a. it has a damaged cord or plug,**
 - b. it is not working properly,**
 - c. it has been dropped or damaged, or**
 - d. it has been dropped into water.**

Return the product to your GF authorized distributor for examination and repair.

- 6. Keep the cord away from heated surfaces.**

7. **Never block the air openings of this product or place it on a soft surface, such as a bed or couch, where the air openings may be blocked. Keep the air openings free of lint, hair and the like.**
8. **Never drop or insert any object into any openings or hose.**
9. **Never use this device while drowsy or sleeping.**
10. **Do not use this device outdoors or operate where aerosol (spray) products are being used.**
11. **Do not use this device in the presence of flammable anesthesia or where oxygen or nitrous oxide is being administered. This device has no AP or APG protection.**
12. **Connect this device to a properly grounded outlet only.**
13. **Unplug the device before filling or cleaning the nebulizer.**
14. **This device is oil-free. Do not lubricate.**
15. **Do not remove the nebulizer while the device is operating.**
16. **Do not leave medication in the nebulizer when it is not in use.**
17. **Use the nebulizer intermittently; the maximum operating period is 45 minutes. The nebulizer must stand unused for 45 minutes between uses.**
18. **The mouthpiece and mask are for use by one person only; in order to avoid infection, do not share them.**
19. **Notice for California Customers- California Proposition 65 WARNING: This product contains a chemical known to the State of California to cause cancer and reproductive or developmental harm.**

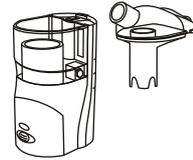
WARNINGS FOR MEDICATION USE

Always follow the prescribing physician's instructions regarding the type of medication to be used, the dosage, the frequency, and duration of the inhalations. The 6700 has been designed for use with aqueous solutions of medication; medication that is too dense or oily will not be nebulized correctly. If a medication has not been nebulized correctly, dilute it with an equal quantity of physiological solution for inhalations (add 2 ml of physiological solution to 2 ml of oily medication).

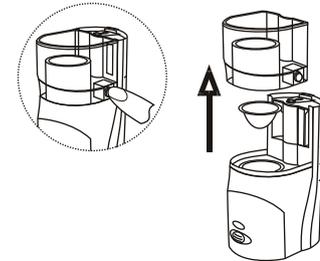
SETUP

⚠ WARNING: Before using the device, ensure that it has been cleaned as described in MAINTENANCE/Cleaning the Nebulizer After Each Use.

1. Remove the top cover and nebulization chamber from the device.

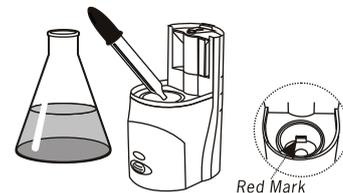


2. Simultaneously press the button on each side of the air-flow chamber to remove the air-flow chamber and medication cup from the device.

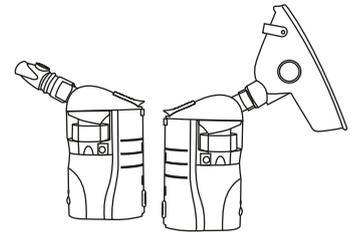
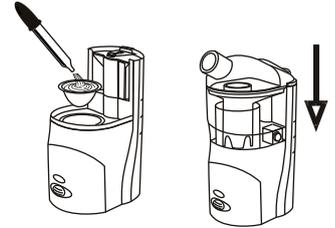


3. Fill the reservoir of the device with distilled water until it reaches exactly the level marked in red (approximately 4 ml). This amount of water serves as a liquid conductor, to conduct the ultrasound waves to the medication, and will never be nebulized.

▲ NOTICE: The nebulizer will not operate if the chamber is not filled with water.



- Carefully insert the medication cup as shown, taking care not to damage it.
- Pour the physician-prescribed medication into the medication cup. If the dose to be inhaled is larger than the maximum capacity of the medication cup, divide it into several separate inhalations.
- Re-install the air-flow chamber, nebulization chamber, and top cover on the device. Apply sufficient pressure when re-installing to ensure that they are securely closed.
- Insert the mouthpiece or one of the two provided masks into the front of the device as shown.



METHOD OF POWERING

After the preparation, connect the device to electrical power. The 6700 can be powered in various ways:

With the AC/DC Adapter

This is designed for use in the home or wherever normal-voltage power supply is available (different connections are available for different voltages).

1. Ensure that device power is OFF. Ensure that the voltage at the socket is the same as that of the transformer, as indicated on the transformer specification plate. Plug the power cord into a properly grounded electrical wall outlet.
2. Insert the transformer plug into the device's power socket.



With the Optional Car Adapter (Cigarette Lighter)

This method allows the patient to take the inhalations when traveling by car.

1. Ensure that the cigarette lighter socket in the car is designed for power of at least 15 watts. Insert the car adapter plug into the cigarette lighter socket.
2. Insert the car adapter pin into the device's power socket.



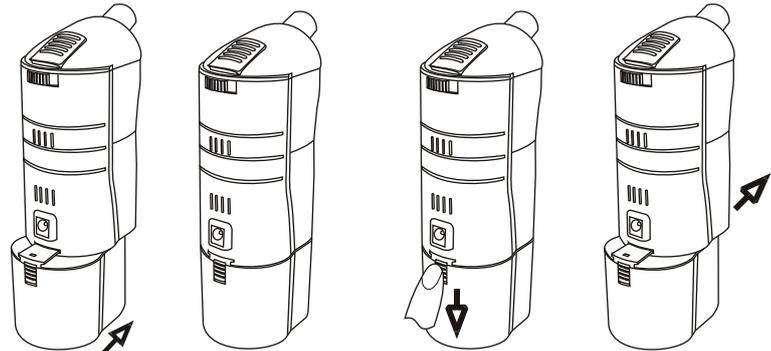
⚠ WARNING: Never use the device while driving.

With the Optional Rechargeable Battery

One can also use the optional Lithium rechargeable battery for the power input. It provides approximately 80 minutes of operation.

To install the battery: Match the device bottom to the battery top as shown at near right. Slide until you hear it click into place.

To remove the battery: Push down on the battery lock as shown at far right and slide the battery out from beneath the device.

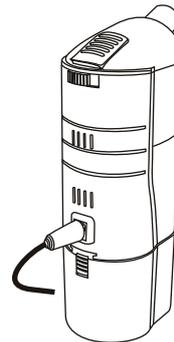


Battery Installation

Battery Removal

To recharge the battery: Insert the AC/DC adapter into the device's power socket. An orange light indicates the battery is being recharged. The orange light will de-illuminate when charging is complete. The minimum recharge time is 5~6 hours.

Info: The first charge of a new rechargeable battery will require at least 8 hours.



Battery Recharging

OPERATION

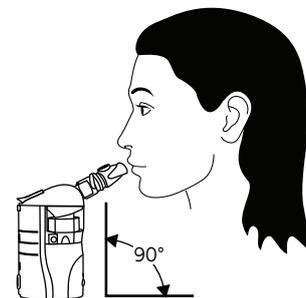
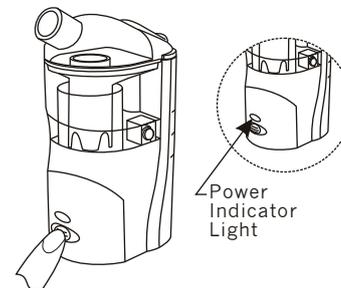
Keep the device and accessories dry. Avoid exposure to direct sunlight, high moisture, and dust.

- ▲ **NOTICE: The device's operating environment must be between 50°F and 104°F (10°C and 40°C) and 10% - 95% RH.**
- ⚠ **WARNING: Ensure that device has been cleaned as described in MAINTENANCE/Cleaning the Nebulizer After Each Use.**
- ⚠ **WARNING: Ensure that device has been prepared for operation as described in SETUP.**
- ⚠ **WARNING: Ensure that the chosen power source, as described in METHOD OF POWERING, is safely connected.**

Inhalation Therapy

1. Press the ON/OFF button to start the device. The green power indicator light illuminates to indicate the device is working normally.
 - ▲ **NOTICE: A light that alternates between red and green indicates a low battery condition; the device can still function normally for a short time, but the battery should be charged as soon as possible.**
 - ▲ **NOTICE: A red light indicates a low battery condition; the device will turn off automatically.**
 - ⚠ **WARNING: To achieve correct function of the device and maximum effectiveness of the treatment, always keep the device in a vertical position during inhalation therapy.**

2. Inhale the medication as prescribed by your physician.
Info: Certain medications have different nebulization rates than others.

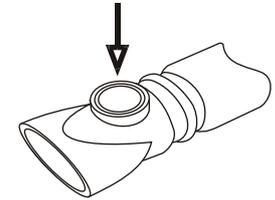


3. The aerosol flow rate can be regulated by adjusting the flow rate controller as shown at right. The recommended practice, especially for children, is to set to the "Minimum" position in order to promote the deposit of the nebulized aerosol directly in the airways.
4. When the mist generated is no longer constant, the medication in the medication cup has begun to run out. When this happens, tap the nebulizer cover gently several times to collect dispersed liquid inside the nebulizer chamber. Then continue the therapy until there is no aerosol at all.



Info: The unit will shut off automatically when the medication cup is nearly empty. At the end of inhalation therapy, a small amount of the medication (about 0.4 ml) will remain in the medication cup; this is normal. This portion of the medication, called the "residual volume", cannot be nebulized.

5. Disconnect the plug from the device's power socket.



Automatic Valve System

The device's mouthpiece has a two-valve system to ensure maximum efficiency of the inhalation and to minimize medication waste. In practice, the mouthpiece expiration valve will open during expiration, allowing the patient's exhaled air to pass to atmosphere, avoiding contamination of the device. During inspiration, the valve will close, maximizing the inhalation amount.

MAINTENANCE

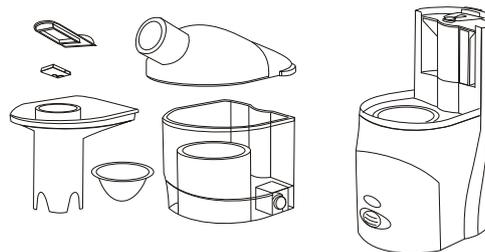
⚠ WARNING: To reduce the risk of burns, electrocution, fire, or personal injury:

1. **Electrical shock hazard - do not remove the outer case of the device. All disassembly and maintenance of the device must be performed by a qualified service technician. Refer service to qualified service personnel.**
2. **This device does not require oil. Do attempt to lubricate any internal parts.**
3. **Unplug this device before cleaning. Do not submerge in water for cleaning.**

Cleaning the Nebulizer After Each Use

⚠ WARNING: To prevent possible risk of infection from contaminated medication, clean the nebulizer as follows after each treatment.

1. Ensure the plug is disconnected from the device's power socket.
2. Remove the top cover, nebulization chamber, air-flow chamber, and medication cup from the device. Remove the filter from the cover.
3. Completely empty the conduction liquid in the reservoir.
4. Wipe the main unit with a clean, soft, moistened cloth.
5. Wash the top cover, nebulization chamber, air-flow chamber, mouthpiece, masks, and medication cup in warm, soapy water, and rinse thoroughly. Allow to air dry. Store in a clean, dry location.



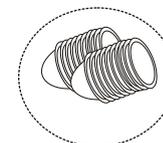
Cleaning the Nebulizer Daily

⚠ WARNING: To prevent possible risk of infection from contaminated medication, clean the nebulizer as follows daily.

Once daily, after washing as above, soak the washed components in a fresh solution consisting of one part warm water and one part white vinegar for 30 minutes followed by a warm water rinse. Allow to air dry. Store in a clean, dry location.

Replacing the Medication Cup

Replace the medication cup after every two treatments. There is a package of 20 replacement medication cups supplied with the nebulizer. Additional medication cups can be purchased from GF Health Products, Inc.



20 Replacement
Medication Cups

Replacing the Air Filter

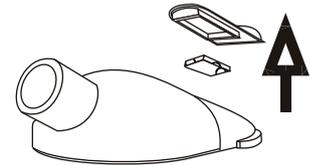
The air filter prevents extraneous substances from entering the mist generated by the device. Replace the air filter after about 20 hours of use, or when the filter turns gray. There is a package of 5 replacement air filters supplied with the nebulizer. Additional filters can be purchased from GF Health Products, Inc.

1. Remove the top cover from the device.
2. Lift the air filter holder from the top cover.
3. Remove the filter from the air filter holder.
4. Insert a new filter into the air filter holder.
5. Replace the air filter holder on the top cover.

▲ **NOTICE: Do not use cotton or other material as a filter.**

▲ **NOTICE: Do not wash or clean the filter.**

▲ **NOTICE: Do not reuse a dirty filter. Do not operate the nebulizer without a filter; nebulizer damage can result.**



STORAGE

Keep the device and accessories dry. Avoid exposure to direct sunlight, high moisture, and dust.

- ▲ **NOTICE: If the device is to be stored long-term, remove the battery.**
- ▲ **NOTICE: The battery's storage environment must be between -4°F and 95°F (-20°C and 35°C).**
- ▲ **NOTICE: The device's storage environment must be between -13°F and 140°F (-25°C and 60°C) and 10% - 95% RH.**

SAFETY PROTECTIONS

The nebulizer is equipped with protection against several unsafe situations. If these situations occur, the nebulizer will either (1) not power up or (2) turn off automatically, as described below.

Protection against incorrect Power Supply

If an AC/DC adapter is used to power the device, ensure the adapter meets local power regulations; if not, the device may not power up (the Power Indicator Light will not illuminate).

Protection Against Overheating

During normal operation, the Power Indicator Light will illuminate GREEN. However, in the two following cases, the device will indicate irregularity by turning off automatically. The device then requires approximately 45 minutes at rest before restarting.

Protection Against Overuse: The electronic components of the device are designed to function continuously for approximately 40 minutes. Operating the device for too long will trigger the heat-protection mechanism and the device will turn off automatically.

Lack of Liquid in the Reservoir: In the event of lack or insufficient liquid in the reservoir, the device will turn off automatically.

6700 TECHNICAL SPECIFICATIONS

- Power Supply: AC/DC Adapter (240V, 50Hz; 12VDC 800mA)
- Power Consumption: ~ 12W (12V/1A)
- Sound Level: < 40dB
- Frequency: 2.8 Mhz
- Particle Range: 0.5 ~ 4.0 microns
- Medication Cup Capacity: 5 ml maximum
- Average Rate: 0.55 ~ 0.80 ml/min.
(NaCl 0.9% Normal Saline)
- Intermittent Use: 45 min. on / 45 min. off
- Operation Conditions:
50°F ~ 104°F (10°C ~ 40°C), RH 10% ~ 95%
- Storage Conditions:
-13°F ~ 140°F (25°C ~ 60°C), RH 10% ~ 95%
- Dimensions:
~ 5.1 x 3.3 x 2.2 in. (~ 130 x 85 x 55 mm)
- Weight without batteries: ~ .44 lb (198 g)

ACCESSORIES INCLUDED

- 1 Pediatric Mask
- 1 Adult Mask
- 1 Mouthpiece
- 1 Carrying Bag
- 5 Spare Air Filters
- 20 Medication Cups
- 1 AC/DC Adapter
- Optional: 1 Rechargeable Battery Pack
- Optional: 1 Car Adapter

LIMITED WARRANTY

SCOPE OF WARRANTY

GF Health Products, Inc. (“GF”) warrants to the original purchaser only that it will replace or repair components, at GF’s sole discretion, that are defective in material or workmanship under normal use and service. All warranties are conditioned upon the proper use of the products strictly in accordance with good commercial practice and applicable GF instructions and manuals, including proper use and maintenance. To the extent that a component is warranted by a third party, GF conveys all of its rights under that warranty to the original purchaser, to the extent permitted. This limited warranty shall only apply to defects that are reported to GF’s customer service team within the applicable warranty period and which, upon examination by GF or its authorized representative, prove to be a warranty item. This limited warranty is not transferable. Within the guidelines set forth in this document, this product is warranted for one (1) year. This warranty does not include batteries. The applicable warranty period shall commence from date of shipment to the original customer, unless there is an expiration date on the component in which case the warranty shall expire on the earlier of warranty period or the expiration date. de all prior negotiations, agreements and understandings with respect thereto. The recipient of this document hereby acknowledges and represents that it has not relied on any representation, assertion, guarantee, warranty, collateral contract or other assurance, except those set out in this document.

OBTAINING WARRANTY SERVICE

This limited warranty shall only apply to defects that are reported to the Distributor from whom the Customer purchased the product within the applicable warranty period. Specific directions will be provided by the Customer Service Representative. Failure to abide by the specific directions will result in denial of the warranty claim.

EXCLUSIONS

The warranty does not cover and GF shall not be liable for the following:

- 1) Defects, damage, or other conditions caused, in whole or in part, by misuse, abuse, negligence, alteration, accident, freight damage, tampering or failure to seek and obtain repair or replacement in a timely manner;
- 2) Products which are not installed, used, or properly cleaned and maintained as required in the official manual for the applicable product;
- 3) Products considered to be of a non-durable nature including, but not limited to: casters, filters, fuses, gaskets, lubricants, and charts;
- 4) Accessories or parts not provided by GF;
- 5) Charges by anyone for adjustments, repairs, replacement parts, installation or other work performed upon or in connection with such products which are not expressly authorized in writing, in advance, by GF;

- 6) Any labor or shipping charges incurred in the replacement part installation or repair;
- 7) Costs and expenses of regular maintenance and cleaning; and
- 8) Representations and warranties made by any person or entity other than GF.

ENTIRE WARRANTY, EXCLUSIVE REMEDY AND CONSEQUENTIAL DAMAGES DISCLAIMER

THIS WARRANTY IS GF'S ONLY WARRANTY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. GF MAKES NO IMPLIED WARRANTIES OF ANY KIND INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IF ANY MODEL OR SAMPLE WAS SHOWN TO THE CUSTOMER, SUCH MODEL OR SAMPLE WAS USED MERELY TO ILLUSTRATE THE GENERAL TYPE AND QUALITY OF THE PRODUCT AND NOT TO REPRESENT THAT THE PRODUCT WOULD NECESSARILY CONFORM TO THE MODEL OR SAMPLE IN ALL RESPECTS. THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT OF THE DEFECTIVE PARTS. GF SHALL NOT BE LIABLE FOR AND HEREBY DISCLAIMS ANY DIRECT, SPECIAL, INDIRECT, INCIDENTAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO: DAMAGES FOR LOSS OF PROFITS OR INCOME, LOSS OF USE, DOWNTIME, COVER, OR EMPLOYEE OR INDEPENDENT CONTRACTOR WAGES, PAYMENTS AND BENEFITS.

The warranties contained herein contain all the representations and warranties with respect to the subject matter of this document, and supersede all prior negotiations, agreements and understandings with respect thereto. The recipient of this document hereby acknowledges and represents that it has not relied on any representation, assertion, guarantee, warranty, collateral contract or other assurance, except those set out in this document.

For additional information on this product or this warranty, please contact a GF Customer Service Representative.

NOTES:

- 1) Additional terms and conditions may apply.
- 2) Freight claims must be notated on the appropriate shipping documents and must be made with immediacy. International, federal and state regulations govern specific requirements for freight claims. Failure to abide by those regulations may result in a denial of the freight claim. GF will assist you in filing the freight claim.
- 3) Claims for any short shipment must be made within three (3) days of the invoice date.