

# GRAINPRO® GRAINSAFE™ BAG 1.0 INSTRUCTION MANUAL

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## 1. INTRODUCTION

The GrainPro® GrainSafe™ Bag - 1.0 is a portable bagged storage for grains and seed normally set up at ground levels, such as on concrete pavement or on a pallet. The use of a platform is also an option. It safely stores any dry agricultural commodities like maize, wheat, paddy, coffee, and others at or below safe moisture content. It works under the principle of hermeticity or airtightness. It is made from a specially designed food-grade, hermetic material and zipper system. Insects' natural breathing process depletes the available oxygen and replaces it with carbon dioxide. This conversion typically occurs within 10 days of storage. The heavier the infestation, the more rapid is the kill. The liner of the GrainSafe™ Bag - 1.0 is a UV-resistant, waterproof, low-permeability material and is resistant to rodent penetration when properly installed.

### 1.1. FEATURES:

- 1.1.1. Preserves the quality of commodities without the use of chemicals.
- 1.1.2. Designed to store commodities up to a capacity of one ton.
- 1.1.3. Applicable for indoor or outdoor use with an installed shade or cover.
- 1.1.4. Maintains effectiveness during rainy and windy conditions, such as monsoons.
- 1.1.5. Prevents rodent damage with an anti-rodent protection setup for platforms.
- 1.1.6. Green technology, certified safe for organic grain storage-secondary packaging.



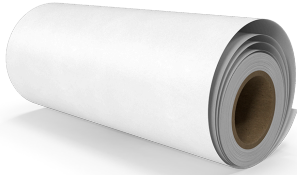

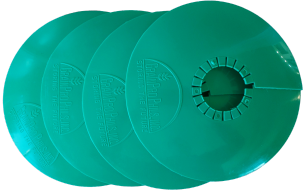

### 1.2. PRODUCT GUARANTEE:

- 1.2.1. In accordance with the terms and conditions herewith, GrainPro® Inc. guarantees the quality of this product per its written warranty, provided it is used according to the instructions in this manual.
- 1.2.2. Please read and understand the manual thoroughly before using the GrainPro® GrainSafe™ Bag - 1.0.



## 2. CHECKLIST

Please inspect your GrainPro® GrainSafe™ Bag - 1.0 package to ensure it includes the following items:

PART NAME	IMAGE
<p>2.1. Carry Bag</p> <ul style="list-style-type: none"> <li>a. GrainSafe bag.</li> <li>b. Small parts.</li> <li>c. Instruction manual.</li> </ul>	
<p>2.2. Zipper Pull.</p> <ul style="list-style-type: none"> <li>d. 2.1. For zipper sealing. Two (2) pieces (Left and right)</li> </ul>	
<p>2.3. Patching Material</p> <ul style="list-style-type: none"> <li>e. White-colored PVC roll for patching the holes and damage. One (1) piece (30cm x 1.5m)</li> </ul>	
<p>2.4. Petacks Bond Glue</p> <ul style="list-style-type: none"> <li>f. For patching PVC materials. One (1) tube</li> </ul>	
<p>2.5. Rodent Guard.</p> <ul style="list-style-type: none"> <li>g. For platform posts to prevent rodent access when storing the empty GS Bag™ 1.0, four (4) pieces per pack.</li> </ul>	
<p>2.6. Instruction Manual.</p> <ul style="list-style-type: none"> <li>a. Installation Instructions.</li> <li>b. Maintenance Instructions.</li> <li>c. Frequently Asked Questions.</li> <li>d. Warranty Clause.</li> </ul>	

### 3. COMPONENTS



### 4. SPECIFICATIONS

Parameters	Standard
Material	Flexible Polyvinyl Chloride
Thickness, mm (inch)	0.83 (0.033) $\pm 7\%$
Color	White
Material weight, g/m <sup>2</sup>	1,050
Oxygen Transmission Rate (OTR), cm <sup>3</sup> /m <sup>3</sup> /day @ 0.1MPa	<500
Water Vapor Transmission Rate (WVTR), g/m <sup>3</sup> /day	<9
Product life, years	15
Warranty, years	5
Sealing mechanism	PVC Hermetic Zipper
Capacity, kg (lbs) based on wheat	1000 (2205)
Dimensions, (AxBxC), cm (inch)	120 x 120 x 200 (47 x 47 x 79)
Product Weight, kg (lbs)	12.5 (28)
Packed Dimensions, cm (inch)	100 x 40 x 10 (39 x 16 x 4)
Packed volume, m <sup>3</sup> (ft <sup>3</sup> )	0.04 (1.4)

## 5. WARNING!

- 5.1. Do not load fresh produce or commodities with high moisture inside GrainPro® GrainSafe™ Bag - 1.0.
- 5.2. Do not wear shoes with spikes as this might damage the GrainPro® GrainSafe™ Bag - 1.0.
- 5.3. Do not directly install the GrainPro® GrainSafe™ Bag - 1.0 ton on top of a wooden pallet or equivalent without putting a mat or thick cardboard to prevent punctures by sharp edges and nails.
- 5.4. Do not smoke during installation, cigarette butts might burn and damage the GrainPro® GrainSafe™ Bag - 1.0.
- 5.5. Do not keep the GrainPro® GrainSafe™ Bag - 1.0 unclean. Refer to 7.4 for proper safekeeping.
- 5.6. Do not allow loading vehicles (i.e., forklift/trucks) to run over the GrainPro® GrainSafe™ Bag - 1.0™, as this will cause damage to the PVC material.

## 6. Recommended maximum moisture content for safe storage (wet basis)

Commodity	Recommended MC
Barley	12%
Black pepper	10%
Cashew nuts	8%
Chia seeds	7%
Chickpeas	12%
Cocoa beans	7%
Coffee beans	12%
Cotton seed	10%
Cowpea	12%
Maize	13.5%
Millet	12%
Mung bean	12%
Oats	12%
Paddy	13.5%
Paddy, rice bran	11%
Peanuts shelled	7%
Red chili pepper	8-10%
Milled rice	12%
Rye	12%
Sesame	5.5%
Sorghum	12%
Soybean	12%
Sunflower	7%
Wheat	13%

You may also contact us through [customer care@grainpro.com](mailto:customer care@grainpro.com) for more information or for commodities that are not on the list.

## 7. INSTALLATION

### 7.1. SITE SELECTION

- 7.1.1. In selecting a site, look for a concrete or asphalt surface.
- Choose a smooth area away from standing or running water.
  - Prepare the site by clearing away all sharp objects (e.g., stones, broken glass, nails, etc.) that may puncture the GrainPro® GrainSafe™ Bag - 1.0.
  - Dedicate an inspection path around the perimeter of at least 75cm.

If the ground will be used as a flooring, put a layer (5 cm) of fine sand or any equivalent on top of the soil. This will serve as a ground foundation to prevent rats and termites from damaging the bottom of the GrainPro® GrainSafe™ Bag - 1.0.



### 7.2. TERMITE CONTROL



#### Overview of termites

- The two most common types of termites are "dry wood" and "ground" or subterranean termites.
- Termites need moisture to survive and will die if exposed to sunlight or open air for more than a few minutes. Their tunnels protect them from these elements.
- High moisture areas like basements and crawl spaces are very attractive to termites and can serve as starting points for an infestation.

#### Description (Subterranean Termite)

- Food and moisture:
  - They need a great deal of moisture from soil or damp wood. Cellulose (from wood) is part of their diet.
- Habitat:
  - Usually, they live in the soil but can be above ground if enough moisture is

present. They have large colonies.

- c. Evidence of activity:
  - Look for protective mud tubes, structures that ascend from the ground, or protrusions from walls, etc.
- d. Prevention:
  - Treat the soil before construction using termiticide.
  - Search “Chemical Soil Treatment” for more information.
  - Set up a termite bait station and monitoring system to monitor activity and bait placements after detection.
  - Maintain regular inspections.
- e. Control measures:
  - With current activity, use a baiting program or a termite barrier treatment.

#### Termite Treatments

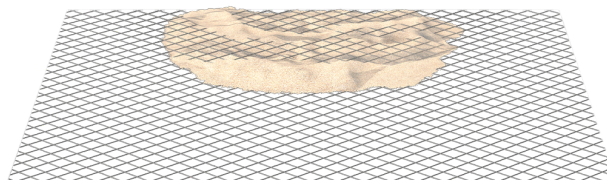
- a. The traditional method of controlling subterranean termites is to apply a liquid pesticide, known as a termiticide, to the soil. This chemical treatment relied on the application of a chemical barrier around and beneath the structure, designed to block all possible routes of termite entry. Any termites attempting to penetrate through the treated soil were either killed or repelled.
- b. There are several different insecticides currently used by pest control operators for termite soil treatments. All of them are safe and effective when used per label directions. The insecticides remain effective in the soil for approximately 5 to 10 years.
- c. Effective termite treatments require a great volume of termiticide.

### 7.3. RODENT CONTROL

#### Prevention:

- a. Eliminate unnecessary folds on the sidewalls of the GrainPro® GrainSafe™ Bag - 1.0 when installed.
- b. Remove all potential sources of food, including scattered grains, from the premises.
- c. Remove all trash and debris around the GrainPro® GrainSafe™ Bag - 1.0 as it may serve as a shelter for rodents.
- d. Keep trash cans closed with tightly fitted lids and away from the GrainPro® GrainSafe™ Bag - 1.0.
- e. Trim trees, bushes, and vines to at least 1.5 meters away, as they may be used by rodents to crawl on top of the GrainPro® GrainSafe™ Bag - 1.0.

(Optional) Procedure for installing wire mesh:

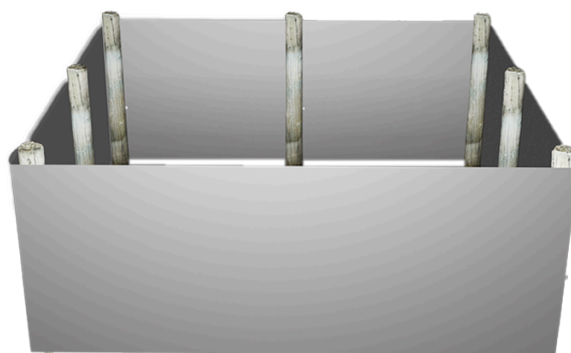


For ground installations and areas with a high risk of rodents' attack, it is highly

recommended to use wire mesh not larger than ¼ inch to exclude mice.

- a. To install the wire mesh, prepare the selected site by clearing away all sharp objects (stones, broken glass, nails, etc.) that may puncture the GrainPro® GrainSafe™ Bag - 1.0 (Refer to 7.1, b.)
- b. Cut the wire mesh at least 50 centimeters wider than the bottom of the GrainPro® GrainSafe™ Bag - 1.0.
- c. Spread the wire mesh before the fine sand and equivalent as a recommended protection for the GrainPro® GrainSafe™ Bag - 1.0.
- d. Then, follow the standard procedure on how to install GrainPro® GrainSafe™ Bag - 1.0.

Procedure for installing GI sheet: (Optional)



- a. Install the GI sheet 1 meter away from the sidewall of the GrainPro® GrainSafe™ Bag - 1.0.
- b. Make sure that the GI sheet has wooden posts or any equivalent that can withstand the wind.

Requirements for GI sheet:






- a. The length should be 1 meter away from the sidewall of the GrainPro® GrainSafe™ Bag - 1.0.
- b. Height is at least 80 centimeters.
- c. Gauge or thickness is at least 16.

## 7.4. LOADING

- 7.4.1. Check the moisture content (MC) of the commodity to ensure that it will be stored at a safe MC.








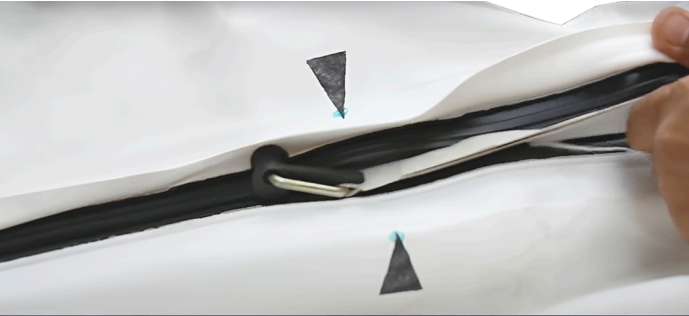

<p>7.4.2. Unfold the bag and lay it out on the prepared site. Place the empty bag on the prepared area with the bottom stretched out.</p>	
<p>7.4.3. Loading procedure (requires at least two persons):</p> <ol style="list-style-type: none"> <li>One person fills the GrainPro® GrainSafe™ Bag - 1.0.</li> <li>The second person keeps the bag open and maintains the proper arrangement of sacks.</li> <li>Load the bagged commodities through the open zipper while stretching the bag to prevent it from being crumpled.</li> </ol>	
<p>7.4.4. Platform positioning (if necessary):</p> <ol style="list-style-type: none"> <li>Wood, bamboo, bricks, or concrete can be used to construct the platform. Ensure that the platform is sturdy and is stable enough to take the load of the GrainPro® GrainSafe™ Bag - 1.0 with the commodity. Added protection, such as a mat, old sacks, or cardboard, is also recommended.</li> </ol>	
<p>7.4.5. Providing a cavity for CO<sub>2</sub> flushing:</p> <ol style="list-style-type: none"> <li>Aligned to the inlet port, create a cavity/canal along the second layer of the stack.</li> <li>This will help facilitate CO<sub>2</sub> flushing and avoid dry ice build-up.</li> </ol>	
<p>7.4.6. Required capacity:</p> <ol style="list-style-type: none"> <li>Keep the sacks stable by loading layers in a crisscross manner.</li> <li>Continue stacking until the desired GrainPro® GrainSafe™ Bag - 1.0 height is reached.</li> </ol>	

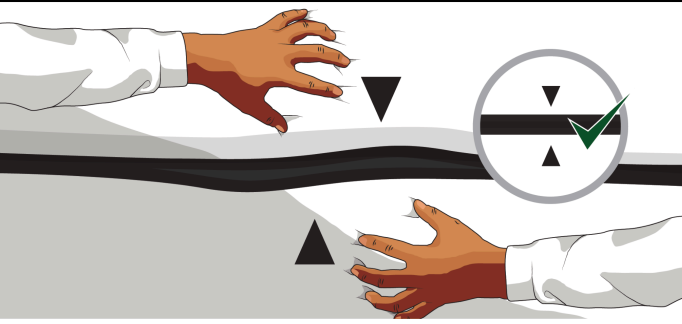


## 7.5. ZIPPING


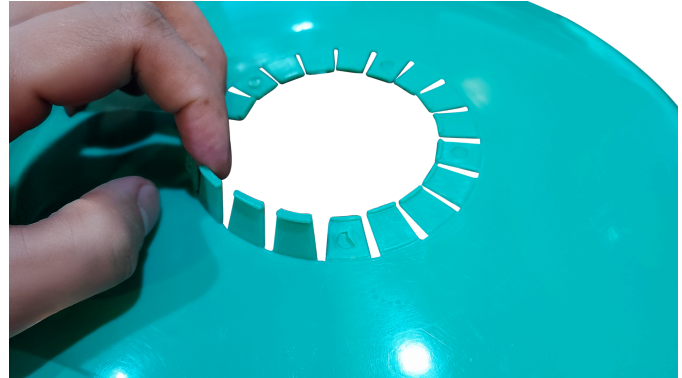
### 7.5.1. Preparing to zip:

- After the GrainPro® GrainSafe™ Bag - 1.0 has been filled to its recommended capacity, position the hermetic zipper flat on top of the stack.



<p>b. Ensure that the zipper tracks are free from dirt so that the zipping can be done properly.</p>	
<p>7.5.2. Using the zipper pull:</p> <p>a. Starting from the end of the zipper, insert and position the smaller black running wheel into the inner side of the zipper track.</p>	
<p>b. Position the larger roller on the outer side of the zipper track, facing upward, to lock the top zipper track.</p>	
<p>c. Rotate the zipper pull's plastic handle 180° or clockwise direction, forcing the tongues and grooves of the two zipper tracks together.</p>	
<p>d. Slide the zipper pull to the other side to seal the entire length of the zipper track.</p>	
<p>e. To make zipping easier, two persons are required. One will do the zipping and the other will hold the other end steadily, making both sections of the zipper in a straight line to avoid zagging.</p>	

<p>7.5.3. Completing the zipper process:</p> <ol style="list-style-type: none"> <li>Align the arrow marks printed on both tracks located above and below the zipper.</li> <li>If the pair does not align, slide back the zipper by pulling the top and bottom parts in opposite directions until the arrows meet or align.</li> </ol>	
<p>7.5.4. Removing the zipper pull:</p> <ol style="list-style-type: none"> <li>When the entire length of the zipper track is sealed, remove the zipper pull. Unlock the zipper pull by turning the handle counterclockwise.</li> <li>Sealed the remaining open zipper track by manually pressing to engage the zipper tracks.</li> </ol>	
<p>7.5.5. Ensuring a complete hermetic sealing:</p> <ol style="list-style-type: none"> <li>Make sure to close the zipper correctly to maintain gas-tightness.</li> </ol>	

7.6. INSTALLATION OF RODENT GUARD (RG).	
<p>7.6.1. For protection against rodent attacks, one set contains 4 pieces of rodent guard.</p> <ol style="list-style-type: none"> <li>The set can be installed on any platform legs with a leg perimeter (round or square) of 22 cm (9") to 44 cm (17").</li> <li>If the leg area is smaller, the rodent guard can be optionally cut in half to fit. Cut along the lines at the back of the rodent guard.</li> </ol>	
<p>7.6.2. Fold the rodent guard's teeth upwards against the sides of the leg to keep it from slipping.</p>	

7.6.3. Make sure to overlap the sides at least one inch.



7.6.4. Lock the overlap using staple wire, cable wire, or any fastener. A user guide is included in the rodent guard sets for the complete installation procedure.

## 7.7. OUTDOOR INSTALLATION

7.7.1. The GrainPro® GrainSafe™ Bag - 1.0 must be protected from the direct heat of the sun by installing shade or cover, such as a roof cone from any available insulating material (i.e., straw, reflective material, matting, garden net, etc.) that are commonly used to protect traditional local storage facilities.



7.7.2. For outdoor installation, use Garden Net with at least 80% UV sun shading rate could be used in addition to the GrainShade to cover unshaded parts or parts being exposed to direct sunlight to prevent condensation.

## 7.8. MONITORING THE OXYGEN LEVEL

7.8.1. Using the oxygen analyzer:

- a. During the first 15 days of installation, oxygen levels should be checked daily using the oxygen analyzer.



- b. Succeeding monitoring should be done twice a week. Normally, oxygen levels should drop 1 - 2 % per day to a level less than 3% (lower levels have been typically observed). Oxygen levels may go up by a few percent, but must not exceed 7%. Except for coffee beans and seeds, in this situation, the sealing is probably compromised, and the commodity may not be adequately protected.



- 7.8.2. When the oxygen does not drop for 3 -7 days or an increase in carbon dioxide is not observed, check for pinholes or damage in the GrainPro® GrainSafe™ Bag - 1.0 liner.

## 7.9. DISMANTLING

- 7.9.1. The commodity will only be unloaded at the end of the storage period.



## 8. PREVENTING CONDENSATION

### 8.1. WHY DOES CONDENSATION OCCUR?

- 8.1.1. Condensation is caused by temperature change, i.e., hot weather by day and cool at night, or sudden rains on a hot sunny day. When air collides with a cool surface at the dew point temperature, the vapor in the air condenses on the surface. Air movement inside the GrainPro® GrainSafe™ Bag - 1.0 follows the natural forces, i.e., in convection currents, hot air rises and cool air sinks (except for the phenomenon called inversion). Hence, when warm air inside the GrainPro® GrainSafe™ Bag - 1.0 rises and hits the cool GrainPro® GrainSafe™ Bag - 1.0 top cover at the dew point temperature, condensation occurs.
- 8.1.2. Therefore, avoiding trapped warm air inside the GrainPro® GrainSafe™ Bag - 1.0 can prevent condensation at the top layer. This is the role of the cone shade or cover. It prevents heating of air inside the GrainPro® GrainSafe™ Bag - 1.0 by repelling solar radiation.

### 8.2. MOISTURE CONTENT (MC) REQUIREMENT FOR SAFE STORAGE

- 8.2.1. Commodities should be dried before storage to at least 12% MC for sorghum, 9-10% for millet, 12-14% for paddy, maize, and 13% for wheat (refer to Table 6 for other commodities).
- 8.2.2. When the commodity is properly dried, there is virtually no “available water” that the microorganisms can use for growth and development.
- 8.2.3. This condition can be maintained by avoiding ambient air with variable moisture content from coming in contact with the dried product using the hermetic storage technology.

## 9. MAINTENANCE AND CARE

### 9.1. REGULAR EXAMINATION

- 9.1.1. Check the zipper track for any small opening/s and push the open track section by hand.
- 9.1.2. Check GrainPro® GrainSafe™ Bag - 1.0 for punctures or cuts. Do not forget to check near the bottom, particularly for rodent damage. If there are any, repair them with the repair kit as described below.
- 9.1.3. Avoid low overhanging structures or tree branches that would allow rodents to jump on top of the GrainPro® GrainSafe™ Bag - 1.0.
- 9.1.4. During the rainy season, the upper surface of the GrainPro® GrainSafe™ Bag - 1.0 should be regularly inspected for water accumulation and damages that would

permit water to seep inside. The content is not adequately protected if the GrainPro® GrainSafe™ Bag - 1.0 is not completely sealed.

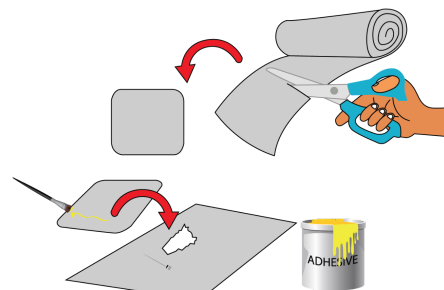
9.1.5. Carbon dioxide levels do not increase:

- a. Check for possible opening of zippers, holes/punctures/cuts.
- b. Seal/repair it immediately
- c. Monitor the carbon dioxide level using the analyzer through the gas sampling port.

## 9.2. REPAIRING PUNCTURES AND OTHER DAMAGES

9.2.1. Use the patching material and adhesive found in the repair kit:

- a. Clean the area to be patched with a damp cloth or organic solvent.
- b. Apply a glue of around 150-200g on both surfaces with a brush or equivalent.
- c. Let it dry for 5-10 minutes and stick and apply sufficient pressure.



9.2.2. Protective Maintenance

- a. Check the patched PVC occasionally and replace or re-patch if necessary.

## 9.3. RECOMMENDED WEEKLY MONITORING

- 9.3.1. Check whether the hermetic zipper has openings anywhere along the length. If openings are observed, press the tracks together by hand.
- 9.3.2. Inspect the liner and make sure that there are no punctures, tears, or rodent damage. If there are any, repair immediately.
- 9.3.3. Check the top of the GrainPro® GrainSafe™ Bag - 1.0 to make sure that there is no standing water, especially during the rainy season. If there is any, remove the water by hand or tools that do not risk puncturing the liner.
- 9.3.4. Make sure that there are no low overhanging structures or tree branches, which would allow rodents to jump on top of the GrainPro® GrainSafe™ Bag - 1.0.

## 9.4. CLEANING

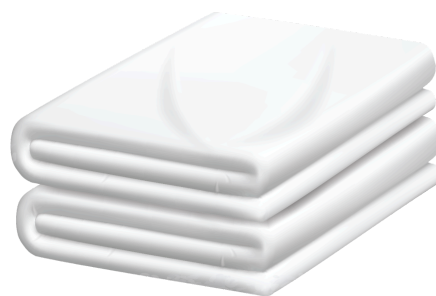
- 9.4.1. Ensure that all stored commodities are removed.
- 9.4.2. Check for any leftover grains, dust, or debris inside the GrainPro® GrainSafe™ Bag - 1.0
- 9.4.3. Check for any tears, holes, or weakened seams that may compromise the GrainSafe Bag's effectiveness. Repair as necessary using the appropriate GrainPro® repair kit.
- 9.4.4. Clean the GrainPro® GrainSafe™ Bag - 1.0 using a dry or damp cloth.





## 9.5. SAFEKEEPING

9.5.1. Once clean and clear of dust, fold it neatly to avoid creases that may weaken the material over time. Store away from heat, direct sunlight, and rodents.



9.5.2. Place the GrainPro® GrainSafe™ Bag - 1.0 in dry, cool storage, free from pests and humidity, until the next use. To prevent rodent attack



## 9.6. PROHIBITED ITEM NOT ALLOWED FOR AIRSHIP

9.6.1. The Glue (for patching PVC materials) is not allowed to be shipped in air cargo. This item will be removed from the package.

9.6.2. The client is advised to purchase the local equivalent.

## 9.7. RECYCLING

GrainPro® GrainSafe™ Bag - 1.0. Its material is made of PVC.

9.7.1. The products can be delivered to the nearest recycling facilities in the area.

9.7.2. Plastic #3 - PVC (Vinyl) can be recycled into paneling, flooring, speed bumps, decks, or roadway gutters.

9.7.3. Where to dispose of your used GrainPro® GrainSafe™ Bag - 1.0?

- In Malaysia, Grainpro® partnered with Gargeon to collect and recycle used hermetic liners. To connect with them, visit their website at [www.gargeon.com](http://www.gargeon.com).
- For the US or EU, Hermetic liners may be sent to the GrainPro® and Neumann Recycling Project. For more information, email us at [sustainability@grainpro.com](mailto:sustainability@grainpro.com).

## 10. FREQUENTLY ASKED QUESTIONS

10.1. DO I NEED TO PUMP THE AIR OUT OF THE GRAINPRO® GRAINSAFE™ BAG - 1.0 OR MODIFY THE AIR INSIDE, FOR EXAMPLE, WITH CARBON DIOXIDE?

- You do not need to pump out or change the atmosphere in any way. The insect's natural metabolic functions use up all the available oxygen and replace it with carbon dioxide. Atmosphere modified with carbon dioxide or vacuum can enhance the quality of stored product, and reduce the insect kill time, but it is not required to eliminate insect infestations.

10.2. IF THE STORED COMMODITY IS ALREADY INSECT-INFESTED, DO I NEED TO FUMIGATE IT OR OTHERWISE KILL THE INFESTATION BEFORE STORING IT?

- You do not need to fumigate or kill the infesting pests before storing the food. The insects will die naturally in a matter of days. The greater the infestation, the faster the kill.
- 10.3. IS THERE ANYTHING YOU DO NOT RECOMMEND THE GRAINPRO® GRAINSAFE™ BAG - 1.0 FOR?
- The GrainPro® GrainSafe™ Bag - 1.0 is not recommended for storing fresh fruits, vegetables, or medicines.
- 10.4. CAN YOU ADD OR TAKE OUT ITEMS ONCE THE GRAINPRO® GRAINSAFE™ BAG - 1.0 IS FILLED AND CLOSED?
- Yes, you may add or take out items. If the added items are infested, the insects will naturally modify the internal atmosphere again and die off.
- 10.5. DO I NEED TO FILL THE GRAINPRO® GRAINSAFE™ BAG - 1.0 ENTIRELY FOR IT TO WORK?
- GrainPro® GrainSafe™ Bag - 1.0 is designed to work effectively at any given load. However, load your GrainPro® GrainSafe™ Bag - 1.0 to its optimum dimensions to ensure full protection from insect infestations.
- 10.6. SHOULD THE GRAINPRO® GRAINSAFE BAG™-1.0 BE ONLY ERECTED INDOORS?
- No, GrainPro® GrainSafe™ Bag - 1.0 is designed for outdoor use, also under all types of climatic conditions.
- 10.7. WILL A PUNCTURE NEGATE THE BENEFITS OF HERMETICITY IF THE GRAINPRO® GRAINSAFE™ BAG - 1.0?
- No, although a hole/tear will allow oxygen to seep into the GrainPro® GrainSafe™ Bag - 1.0 and will cultivate live insects around the puncture/hole. Tight stacking of the stored commodity tends to prevent the spreading of infestation inside the GrainPro® GrainSafe™ Bag - 1.0. We recommend immediate repair of all punctures or tears.
- 10.8. HOW DRY MUST THE GRAIN BE TO STORE IT SAFELY IN THE GRAINPRO® GRAINSAFE™ BAG - 1.0?
- The GrainPro® GrainSafe™ Bag - 1.0 works best with grains at or below critical moisture content.
- 10.9. CAN THE RODENTS BITE RIGHT THROUGH THE PVC MATERIAL WHEN THE GRAINPRO® GRAINSAFE™ BAG - 1.0 IS ERECTED?
- Yes, but only if the sides are not tight enough. Rodents can only gnaw on the smooth, slippery surface of a GrainPro® GrainSafe™ Bag - 1.0 if the sides are not properly stretched. Rodents may have access to the top by dropping down from any object hanging over the GrainPro® GrainSafe™ Bag - 1.0, such as a low-hanging branch of a tree. In areas with high rodent activity, we recommend that the GrainPro® GrainSafe™ Bag - 1.0 be protected using anti-rodent barriers.
- 10.10. CAN AGRICULTURAL COMMODITIES OTHER THAN GRAIN BE STORED IN A GRAINPRO® GRAINSAFE™ BAG - 1.0?
- Yes, most dry agricultural commodities such as seeds, pulses, beans, coffee, cocoa, some dried fruits, and even chilies can be safely stored. When in doubt, ask GrainPro®.



## 11. WARRANTY CLAUSE

GrainPro® hereby warrants that the product sold to buyers shall be free of defects in workmanship and materials for a period as follows, starting from the date of shipment (B/L): five years for the GrainPro® GrainSafe™ Bag - 1.0 liner and zipper. One year for all other parts.

The warranty liability is limited to the replacement of defective products within the warranty period at GrainPro's plant in accordance with the provisions specifically and expressly set forth herein.

The Buyer will pay for the products that need to be replaced under warranty, a percentage of the full list price according to the ratio between the period that has passed until replacement and the full warranty period.

The Buyer shall bear the shipping costs for shipment of defective Products to GrainPro®, and GrainPro® shall bear the shipping costs of returning good Products to the Buyer.

The Warranty does not cover the cost of any service, work, or material required for the replacement of defective Products at the site of installation.

GrainPro® shall have no obligation under the warranty to replace defective Products or parts thereof if the defect is a result of any of the following: normal wear and tear; damages occurring after delivery, accidents, acts of God, or catastrophes, buyer's fault or negligence, improper storage or installation, and improper maintenance.

Replacement costs and shipping charges for Products found not to be under warranty as specified above shall be paid in full by the Buyer before new/refurbished Products are shipped.

Notwithstanding the above, if the Products include main parts or sub-assemblies purchased by GrainPro® from other vendors ("Additional Equipment"), then the period and terms of warranty for Additional Equipment are limited to the period and terms offered by the vendors of such equipment.

The Buyer agrees that the warranty liabilities of GrainPro® shall be and are limited to the express foregoing terms: THE EXPRESS WARRANTIES AND OBLIGATIONS SET FORTH ABOVE ARE AND SHALL BE IN LINE WITH ALL OTHER WARRANTIES AND OBLIGATIONS OF GRAINPRO®, and EXPRESSED OR IMPLIED. EXCEPT TO THE EXTENT HEREIN PROVIDED, GRAINPRO® DOES NOT MAKE AND SHALL NOT BE DEEMED TO MAKE ANY WARRANTY WHATSOEVER TO ANY END USER OR ANY OTHER PERSON OR PARTY, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR USE OR PURPOSE. GRAINPRO® SHALL NOT BE LIABLE FOR ANY LOSS OF USE, SALES, OR PROFITS, OR ANY INDIRECT, CONSEQUENTIAL, OR INCIDENTAL DAMAGES CAUSED BY OR SUFFERED AS A RESULT OF THE SALE OR USE OF THE PRODUCTS.

For further information and clarification, visit our website at [grainpro.com](http://grainpro.com), email our Technical Support team: [customercare@grainpro.com](mailto:customercare@grainpro.com), or call (+6347) 252-7884.