



Instruction Manual

PURIBAG and PURIBAG PRO

PURIBAG:

The Puribag is a flat pack, 10L capacity water purification bag designed to capture, treat and store contaminated fresh water sources. Puribag can be stockpiled for up to 2 years, and rapidly deployed to where it is needed. The Puribag is lightweight (~186 grams) and fits in the palm of your hand, it's easily mobile and can provide a family of 4 with their drinking water needs for up to 2 weeks, or an individual for up to 1 month.

P&G Purifier of Water sachets, the primary treatment in the Puribag system are a powdered mixture that removes pathogenic microorganisms and suspended matter, rendering previously contaminated water safe to drink. P&G Purifier of Water was developed by Procter & Gamble (P&G) in collaboration with the US Center for Disease Control and Prevention (CDC). P&G Purifier of Water contains a chlorine disinfectant (calcium hypochlorite) for killing bacteria and an iron salt coagulant (ferric sulfate) for removing suspended matter, protozoa, and viruses. It also contains a buffer, clay and polymer to provide good coagulation and flocculation.

All of the ingredients used in P&G Purifier of Water are used to purify drinking water in the United States and other developed countries. The difference is that P&G Purifier of Water provides these ingredients at the household level rather than in a centralized treatment facility. P&G Purifier of Water is safe for long-term use by the entire family, including infants, and is considered a 'protective' technology by the World Health Organization (WHO). P&G Purifier of Water's application results in water quality that meets WHO guidelines.

P&G Purifier of Water has been proven to eliminate disease-causing microorganisms and to remove virtually all suspended material. P&G Purifier of Water results in removal of more than 99.99999% of bacteria (including those that cause cholera and typhoid fever), 99.99% of intestinal viruses (including those that cause hepatitis A), and 99.9% of protozoa (including Giardia and Cryptosporidium).

The secondary water treatment function of the Puribag consists of a carbon water filter disc positioned directly behind the outlet tap on the front of the bag designed to remove residual particulate matter post treatment, and remove any colour, taste or odour from the treated water prior to human consumption.

Puribag provides an all-in-1 water treatment system designed for provision of safe drinking water in disaster and emergency event situations, or for any other situation where mobile safe drinking water provision is required.

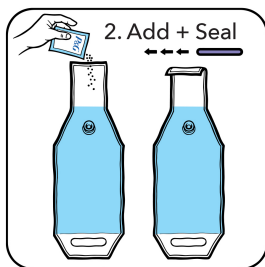


Using your Puribag:



Fill – Fill Puribag with fresh water through the open end of the bag until it reaches the fill line as indicated.

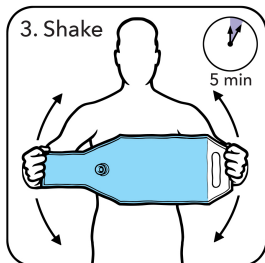
Do not overfill.
Do not use saltwater.



Add + Seal – Open the powder sachet and add contents into the dirty water. Seal the bag with the purple sealing rod provided.

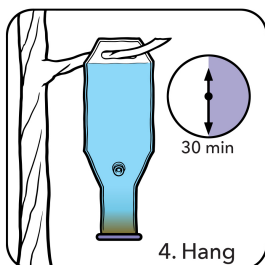
To seal, fold the open end of the bag over approximately 1-2cm and slide on purple sealing rod to seal bag. (n.b. yellow spear runs along the underside of the fold, the purple casing runs along the outside of the fold).

The powder sachet will colour the water orange; this is normal and indicates the powder is working. The final drinking water should be clear.



Shake - Shake the bag for 3 - 5 minutes, or until properly mixed through.

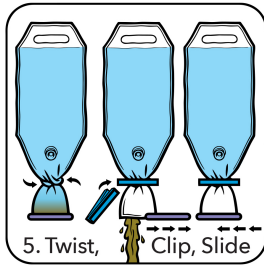
It is important to thoroughly mix the sachet contents into the water to ensure the water is purified.



Hang - Hang the bag from a hook or branch to allow the waste to settle to the bottom of the bag. The minimum treatment time to allow the sachet to activate is 30 minutes.

Ideal settling time is minimum 1 - 2 hours. Longer settling times are recommended for dirty water to extend filter life. Some floc may become stuck on side of the bag during settling. If so, gently massage the bag to displace the floc and allow it to reach the bottom section of bag.

Water should be visually clear before removing from Puribag.



Twist, Clip, Slide – Once properly settled, carefully twist the bag just below tap and apply clip to hold the bag in the twisted position. This separates the waste material from the rest of the water in the bag.

Carefully slide the purple sealing rod backwards to open the bottom bag section and allow the waste material to evacuate. Ensure waste is collected and properly disposed of in a waste receptacle or buried. (Note: It is normal for a small amount of water to leak through the clip; this is for rinsing of lower bag section prior to re-sealing it).

Once bottom bag section is evacuated, slide purple sealing bar back into sealed position ensuring the bottom of the bag is properly sealed.



Unclip + Drink – Remove the blue clip separating the bag sections and allow the bag to un-twist back to the rest position.

The water is now safe to consume and can be stored for 2 to 3 days. (n.b Flowrate of water from the tap will decrease as the bag empties, or as the filter begins to block. Apply pressure to the bag to increase water flowrate).

Note: If larger volumes of treated water are required quickly, see Emptying of Puribag instructions below.



Emptying of Puribag:

There are 2 ways to remove the treated water from the Puribag.

First is via the filter/ tap on the Puribag. This is ideal for normal drinking use.

Second is via the purple sealing rod at the base of the bag and is ideal for cooking and cleaning. n.b. this requires a separate clean bucket and clean piece of cloth to act as a filter.

Place clean bucket with cloth over the top directly under the purple sealing rod and slowly pull the rod away from the Puribag. This will allow water to flow from the base of the bag through the cloth and into the bucket below. This is ideal when larger quantities of clean water are required quickly.

Further usage instructions:

The flow of water from the tap may slow as the volume in the bag above the tap height lowers. If this occurs, simply grasp the bag and squeeze to create more pressure in the bag. This should increase water flow.

If applying pressure to the bag does not increase flow, then it is likely the filter has some blockage and may need to be removed and cleaned or replaced.

How to remove the filter:

Lay the Puribag on its back side and carefully remove the soft plastic tap. Once removed, place your thumb or finger onto the exposed filter cartridge and press firmly downward to remove the filter from its housing. Re-attach soft plastic tap to seal the Puribag.

Stand Puribag upside down (handle end to the ground) and carefully slide the purple sealing rod off the Puribag. Slowly move the filter cartridge up toward the open end of the Puribag and remove filter from the bag. Re-attach purple sealing rod to seal the Puribag.

Clean the filter by gently wiping the contaminants from the fabric on the filter. If contaminants remain, spray gently with water to further clean the filter cartridge.

If filter becomes damaged, replace it with a new one.

Once filter is cleaned, remove purple sealing rod and insert filter cartridge back into the bag. Carefully move the filter downwards to align it with the filter housing. Once aligned, press it firmly back into the filter housing ensuring a good seal.

Cleaning your Puribag between uses:

As the Puribag treatment process disinfects the water in the bag each time the bag is refilled, it is recommended that the bag is rinsed with clean water or wiped internally with a clean cloth only if it is visually dirty or contains foreign matter.

The carbon filter can block during evacuation of the treated water from the bag. It is highly recommended that the filter be removed and rinsed/ wiped clean after each use to maintain an acceptable flow rate.

n.b. see troubleshooting (blocked filter) for directions to remove filter cartridge.



Cleaning Puribag for Storage:

Remove filter from housing and clean using clean water and a sponge, or spray bottle to remove orange build up. Re-insert filter into housing.

Mix up 2 litres of clean water with 2 tablespoons of white vinegar. Pour into the open end of the Puribag and seal with purple sealing rod. Agitate the bag ensuring the liquid touches all surfaces of the internal side of the bag and leave to sit for no less than 30 minutes.

Run a small amount of the cleaning solution through the outlet tap on the Puribag to clean the filter, and then carefully release the rest of the cleaning solution by removing the sealing rod. Take care not to come into skin contact with the cleaning solution, and do not ingest.

Rinse Puribag with clean water and allow to air dry before folding and packing away until its next use.

Things to avoid:

Do not consume contents of chemical packets.

Do not consume the waste material.

Do not consume water if still discoloured after treatment and filtration.

Do not puncture or cut the Puribag.

Do not use Puribag to treat salt water.

Do not leave Puribag exposed to sunlight when not in use.

First Aid:

P&G sachet dry powder can be harmful if absorbed through the skin or swallowed. Avoid contact with skin. Do not get in eyes. Wash hands thoroughly with soap and water after handling and before eating or drinking. Contains iron sulphate.

If contact in eyes:

- Rinse eye/s gently with clean water for 15-20 minutes.

If contact with skin:

- Remove contaminated clothing.
- Rinse skin area thoroughly.

If swallowed:

- Seek medical advice.

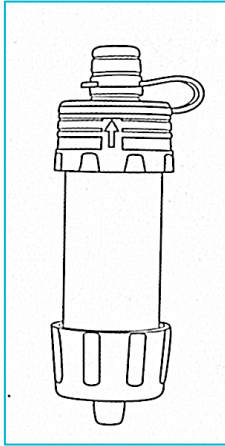
Storage/ Disposal:

Store Puribag away from heat, humidity and sunlight when not in use. When in use, it's best to keep Puribag out of direct sunlight for extended periods.

Dispose of treatment waste away from humans and animals. Bury the waste or dispose of in rubbish bin.



PURIBAG PRO SYSTEM:



The **Puribag Pro System** includes the adaptation of a hollow fiber membrane filter straw (kit) to the outlet spout of the Puribag, thereby incorporating multiple water treatment methods, including - flocculation & sorption, chlorine disinfection, carbon filtration, and membrane filtration to provide you with the ultimate level of protection, no matter where your journey takes you.

Inclusions:

The Pro filter includes 1x membrane straw filter, 70cm clear extension hose, and Puribag adaptor which can be clipped onto the spout of the Puribag. This is recommended to be done after steps 1 - 6 (as above) have been completed. (*Note, if the water in the Puribag is visibly clean and free of debris before treatment, it is possible to skip the use of the P&G sachet and simply run the clear water through the Pro membrane filter kit before consumption to conserve your P&G sachets.*)

Connecting the Pro filter add-on to your Puribag:

To connect the Pro filter straw to your Puribag, simply lay the Puribag on the ground on its back, and carefully remove the soft plastic tap on the front of the Puribag. You can do this by simply placing a screwdriver (or similar) between the hard plastic spout, and soft plastic tap and gently levering off the soft plastic tap. Following this, you simply plug the Puribag Pro straw filter (kit) adaptor into the outlet spout of the Puribag. It will click into place.

To dispense treated water, simply return the Puribag to its hanging (upright) position and hang the end of the straw filter lower than the base of the Puribag. After removing the straw filter sealing cap, filtered water will flow from the filter straw until sealing cap is replaced. (*n.b. if flow is slow, simply apply pressure to the Puribag to force any air from the hose and filter straw*). When not in use, the sealing cap should be replaced, and membrane filter straw hooked through the top handle of the Puribag keeping the filter elevated.

Additional uses for the filter straw:

The Puribag Pro filter add-on kit can be used in conjunction with the Puribag (as above), or it can be used on its own by lowering the adaptor end of the hose into the water source and sucking water through the filter straw. Or remove the hose and simply suck water directly through the filter straw. The filter straw can also be fixed to most common threaded water bottles.

Cleaning the Pro filter straw:

To clean the Puribag Pro filter straw (we recommend detaching the hose and Puribag adaptor from the filter straw) simply fill the supplied cleaning syringe with clean water and insert the end of the syringe into the outlet end of the filter straw.

Depress the syringe plunger and force clean water backwards through the filter membrane. (This is a process called “backflushing”). Continue this process until clear water is flowing out of the inlet side of the straw filter. Once complete, simply re-attach the filter straw to the extension hose on the inlet side of the filter.



Specifications:

Puribag contents:	<i>10L Puribag. Purple Sealing rod x1. Clip x1. Filter disc x 1. P&G sachets x12.</i>
<i>plus</i>	
Pro System inclusions:	<i>Puribag + 0.1-micron membrane filter straw, clear extension hose, Puribag adaptor, cleaning syringe.</i>
Pro Kit inclusions:	<i>Puribag Pro System <u>plus</u> Puribag carbon filter refill pack, Puribag Expansion pack, and Water Security drawstring carry bag.</i>
How it works:	P&G flocculant/ disinfectant sachets combined with carbon filter disc <i>plus</i> 0.1-micron membrane filter straw (with Pro system and Pro kit)
Certifications:	World Health Organisation (HHWT program) 2 star ** Comprehensive protection rating
Capacity:	Upto 120 litres (12x 10L treatments) Upto 5,000L (Pro System/Kit)
Purification time:	30 minutes
Settling time:	Water dependent. Recommended 1 - 2 hours or until properly settled.
Removals:	Effective removal of turbidity, pathogenic microbes and foreign matter, and significant reduction of Arsenic in source waters. Bacteria (> 4 log reduction), Viruses (> 4 log reduction), Protozoa (> 3 log reduction).
Flow rate:	Approximately 0.5L / minute (Puribag only) Up to 800ml/min (Pro Membrane filter straw)
Weight:	~180 grams (Puribag) ~300 grams (Pro System) ~700 grams (Pro Kit)
Dimensions:	Flat: 840 x 290 x 40mm Rolled up: 290 x 90 x 70mm
Operation:	See graphical instructions on bag, website www.puribagwater.com , or on social media channels – Puribag Water
Shelf-life:	3 years from sachet production. Store in a cool, dry place when not in use.



Troubleshooting:

Problem	Cause	Solution
Low flow/ No flow	Blocked filter	If filter is blocked, remove the outer tap spout on the bag and press the filter to remove it from its housing. Rinse thoroughly with clean water. Once cleaned, the filter can be replaced in the opposite order.
	Low water level	If low water level, you can squeeze the Puribag to create additional pressure in the bag and increase water flow.
Low flow/ No flow (Pro system)	Air lock in hose/ filter straw or blocked filter	Check filter straw for blockage. If blocked, fill syringe provided with clean water and flush backward through filter to remove blockage. If filter not blocked, restricted flow can be caused by an airlock in the filter straw add-on unit. Simply apply pressure to Puribag to force water through filter straw removing any air blockage.
Leaking bag	Sealing rod not fitted correctly	Remove and re-fit sealing rod. Take care to fold end of bag over with 1-2cm overlap before inserting purple sealing rod. Yellow spear beneath fold, purple casing over top of fold.
	Rip in bag	Carefully pat dry bag area around rip/ tear, and simply cover area with available tape until bag seal achieved.