

eZYDRAIN

Plumber & Retail Brochure

Healthy Living with EzyDrain

Protects against pests, odours and disease

Suitable for:

- Homes
- Hotels
- Hospitals
- Restaurants
- Public Venues
- Offices
- Outdoors



Premium



Antibacterial AgNP
Technology & ABS

Economy



Made with
Recycled ABS



eco friendly

www.ezydrain.com



WaterMark
WMTS 522-
12021001.2008
Certified



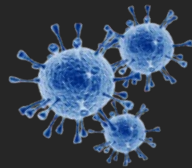
Welcome to Healthy Living with EzyDrain

The modern healthy lifestyle includes addressing our health in many ways. We eat well, exercise regularly, keep a clean home and office, have ergonomic furniture, and spend time with friends and family.

But what about the problems posed by airborne disease, bacteria and odours from plumbing pipes, contaminated backflow, and vermin?

EzyDrain provides a simple cost effective solution for all these problems working 24/7 to protect your environment.

There are millions of homes, offices, hospitals and restaurants in the world, floor drain wastes are commonly found in kitchens, laundries, and bathrooms, which are all connected to the sewerage system. This connection allows disease including SARS (COVID-19), odours, and vermin to escape from the drains back into the living environment.



Novel Coronavirus (COVID-19)

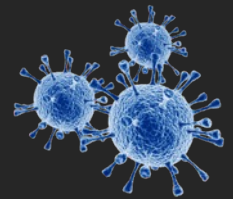
Evidence that Novel Coronavirus is airborne is already understood and established, so much so that there is growing consensus that building connected bathroom ventilation is the **main channel of transmission**, rather than via surfaces as originally believed. This changes the prevention strategy defended until now.

A WHO report stated harmful viruses, including SARS can be sucked from the sewage system into the home if, for example: strong extractor fans working in a bathroom draw escaping infectious air plumes from the floor waste vents into living spaces.

EzyDrain has been designed with the DIY consumer in mind, being easily fitted into 100mm and 90mm internal diameter floor drain waste fittings and pipes.

Designed in Australia and Patented worldwide, and all EzyDrain products act as a pathogen barrier to prevent disease with the simplicity of a spring-loaded one-way trap mechanism.

Premium EzyDrain has the added benefit of proven AgNP antibacterial technology which is chemical free and kills harmful bacteria that cause disease.



COVID-19 and Plumbing

U-traps, which hold water at the bottom of plumbing pipes prevent air from circulating but can run dry or if air pressure changes cause gurgling that leads to infectious gases air leaks.

Stacked plumbing systems found in high rise buildings can spread diseases vents including COVID-19 from floor to floor through the connected plumbing systems and floor waste.

Infectious plumes drawn into living spaces can also infect air conditioning systems spreading the disease rapidly across connecting rooms or throughout multiple floor levels in high-rise apartments and buildings.

EzyDrain is a simple step towards protecting your living spaces and air conditioner 24/7 from contamination.



Commercial & Home Laundries



Showers



Household Bathrooms



Commercial Kitchens



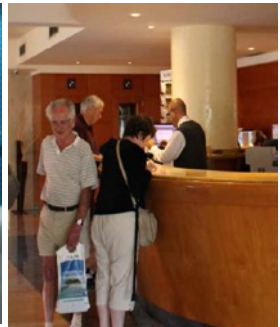
Water Tanks & Grate Pits



Medical Facilities



Home & Public Toilet Areas



Hotels

EzyDrain Uses and Benefits

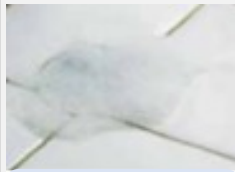
Designed to be installed in floor wastes and plumbing pipes in under a minute

EzyDrain is an ideal for use in homes or commercial buildings and kitchens indoor and outdoor

Premium EzyDrain has added benefit to kill harmful bacteria to reduce disease and mould



Stops Bad smells
leaking into living spaces



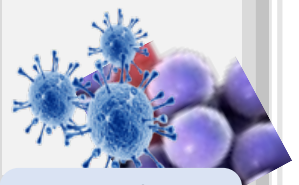
Stops soap suds
rising that make floors slippery



Traps small items
falling in drain for easy retrieval



Reduces
contamination in air conditioners



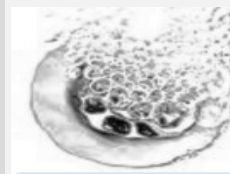
Protective barrier
from Coronavirus & Bacteria leaking



Chemical resistant
and will prevent drain burping



Kills & Reduces
harmful mould spores



Stops water rising
into buildings in flood prone areas



Protection from
airborne diseases when cleaning



Helps reduce risk
of sick-house syndrome



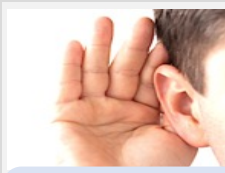
Reduces drain flies
from breeding & ants entering



Stops pests
& rodents entering water tanks



Stops whistling
from rising wind in plumbing pipes



Reduces sound
travelling from dry neighbouring pipes



No chemical fumes
to cause product sensitivity

***EzyDrain Premium antibacterial qualities
kills mould and disease 24/7 without the use of any chemicals***

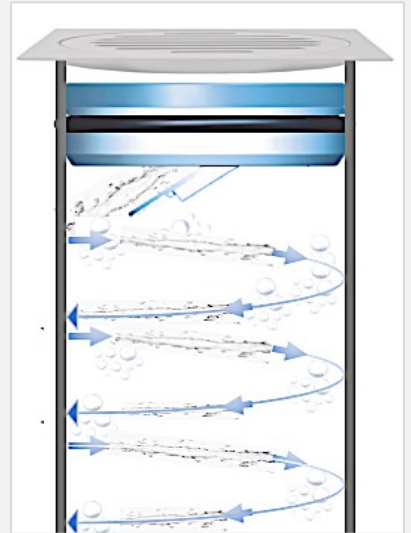
Results Before & After

EzyDrain installed into Plumbing Pipe



Works to keep pipes clean without any labour 24/7

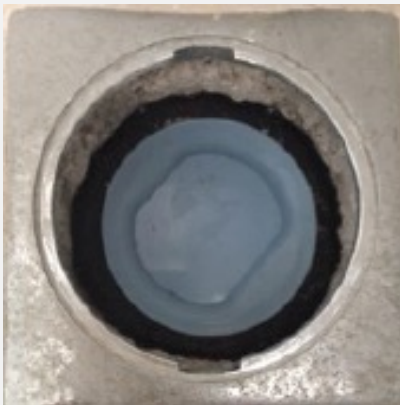
EzyDrain spiraling vortex water distribution removes built-up grime, leaving your pipes pristine



Works to keep pipes clean without any labour 24/7

Keep your plumbing pipes safe and fresh with EzyDrain
Premium EzyDrain kills disease without chemicals

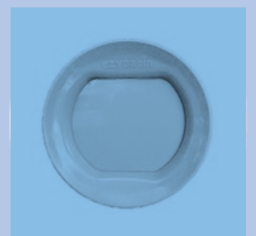
Fits easily in Obstructed Pipes



EzyDrain Twin Fin Design easily fits into obstructed Pipes caused by grout or debris without the need to remove it to install

Missing your floor grate?

Install EzyDrain which can assist by covering the exposed opening to prevent items falling into your open plumbing pipe or to protect from accidental injury stepping in it



Product Applications

Protection And comfort For Your Family At Home

From nasty smells that cause discomfort to residents and visiting guests.

Installing EzyDrain will keep the family safe from harmful pathogens such as Staph or Covid-19 whilst reducing mould in shower areas and bathrooms which is unsightly and a health hazard for respiratory, immune and skin problems.



Essential For Aged Care And Hospitals

Aged Care and Hospital facilities combined have over 9 million admissions per day and high turnover of occupants and guests, rooms can be subject to a wide variety of potential pathogens brought in from visitors and transferred to the room environment.

These pathogens are most likely to accumulate in the drainage system via the normal use of showering and bathroom usage. Contaminated waste from the sewers and drains can easily and rapidly spread disease or contagion. These can include golden staph and salmonella.



Covid-19 poses an issue for all facility managers to provide additional layers of protection to create and sustain a healthy and safe environment for residents, guests and staff.

A single modern nursing home or hospital can have numerous floor drains, in the bathrooms, laundries and kitchen areas. The incorporation of EzyDrain offers the opportunity to secure an environment free of fumes, odours, vermin and backflow, reducing potential complaints and added health issues.

EzyDrain Benefits

- Reduces contamination of rooms and air conditioning systems from harmful bacteria and Covid-19
- EzyDrain helps reduce costs of deodorisers
- Provides a safer environment for guests with the added layer of pathogen protection against Covid-19
- Great for guests allergic or sensitive to chemical fumes within proximity to the skin, lungs or nose
- Reduces sound that travels through dry plumbing into neighbouring guest's rooms
- Eliminates pests and rodents from entering via floor drains

Ideal For Hotels

Hotels worldwide vary in star rating and services available. With the high turnover of occupants, rooms can be subject to a wide variety of potential pathogens brought in from overseas and transferred to the room environment. These pathogens are most likely to accumulate in the drainage system via the normal use of showering and bathroom usage.

Covid-19 poses an issue for hotel owners to provide additional layers of protection to create and sustain a healthy and safe environment for guests, visitors and staff.

Travellers after a long journey arriving to a hotel only to find their room smelling of drain odours, creates an unhappy customer who will be less likely to return and very likely to complain to management and friends.



All hotel have numerous floor drains, in the bathrooms, laundries and kitchen areas. The incorporation of EzyDrain offers the opportunity to bring guests an environment free of fumes, odours, vermin and backflow, cutting down on complaints and poor reviews.

Premium EzyDrain is your antibacterial protection 24/7

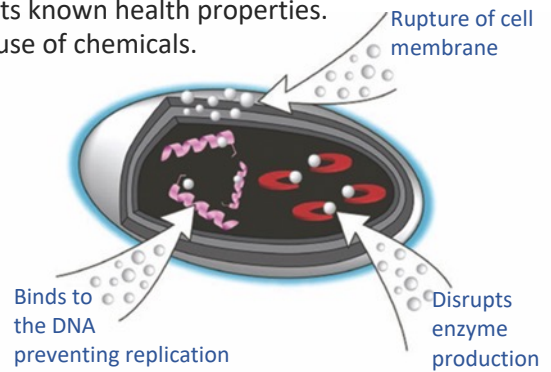
Kills Harmful Bacteria Without Chemicals

Recent studies show AgNPs protect against SARS-CoV2 (Covid-19)

AgNP's are well known for antibacterial qualities, the Phoenicians used Ag in storage vessels for water, wine and olive oil to prevent spoilage and has long been preferred because of its known health properties. EzyDrain is your antibacterial protection against disease without the use of chemicals.

When harmful bacteria comes in contact with Premium EzyDrain, the cell membrane ruptures, disrupting enzyme production by binding to its DNA to prevent replication.

With only a few Ag atoms needed to kill a cell, EzyDrain's unique plastic formulation provides more than a lifetime's supply of active antibacterial elements evenly blended throughout, ensuring that even if scratched, chipped or damaged, EzyDrain will continue to provide antibacterial protection 24/7.



Recent scientific studies as reported by National Institute of Medicine, PLOS and other reputable scientific journals reported AgNPs effectively inhibits extracellular SARS-CoV-2, by interfering with the structural proteins of the virus, and their ability to bind with cell receptors or genetic material interrupting replication. The main antiviral mechanism of AgNPs against SARS-CoV-2 is preventing viral attachment by damaging the surface proteins to disrupt the structural integrity of virions.

Scientifically Tested And Proven Results

There are many airborne diseases emanating from our sewers. These include: salmonellosis, shigellosis, diarrhoea, trachoma and melioidosis. EzyDrain antibacterial formula has a proven scientific bacterial kill rate performance level in testing conducted at the Microbe Test Centre and Laboratory in Guangzhou China.

Test Results prove Premium EzyDrain antibacterial plastic compound has a kill rate in the first 24 hours of:

• **44.12% on contact with Staphylococcus Aureus**

Staphylococcus aureus is a common bacterium that lives on the skin or in the nose, commonly referred to as golden staph. In most situations it is harmless. However, if it enters the body through a cut in the skin, it can cause a range of mild to severe infections, which may cause death in some cases.

• **42.29% on contact with Escherichia Coli**

Escherichia coli is one of the most frequent causes of many common bacterial infections, urinary tract infection (UTI), and traveller's diarrhoea, and other clinical infections such as pneumonia.

• **36.29% on contact with Staphylococcus Epidermidis**

Staphylococcus epidermidis is commonly isolated from healthy human skin, it is also the most frequent cause of hospital acquired infections from contaminated medical devices.

• **35.76% on contact with Pseudomonas Aeruginosa**

A bacteria and germ that can cause infections in humans, and can be spread to people in healthcare settings, it can cause urinary tract infections, respiratory system infections, dermatitis, soft tissue infections, bacteremia, bone and joint infections, gastrointestinal infections, and a variety of systemic infections.

• **25.50% on contact with Enterococcus Faecalis**

Has a broad range of resistance genes and cause a variety of infections, including endocarditis, urinary tract infections, prostatitis, intra-abdominal infection, cellulitis, and wound infection as well as concurrent bacteremia.

• **24.53% on contact with Bacillus Cereus**

Although Anthrax remains the best-known Bacillus disease, recently other Bacillus species have been implicated in infections of abscesses, bacteremia/septicemia, wound and burn infections, ear infections, endocarditis, meningitis, ophthalmitis, osteomyelitis and peritonitis

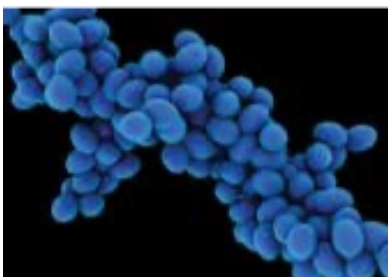
• **23.20% on contact with Salmonella Choleraesuis**

A common cause of food poisoning.

• **23.15% on contact with Klebsiella Pneumoniae**

A "superbug" that causes a range of diseases people and can cause different types of healthcare-associated infections, including pneumonia, bloodstream infections, wound or surgical site infections, and meningitis.

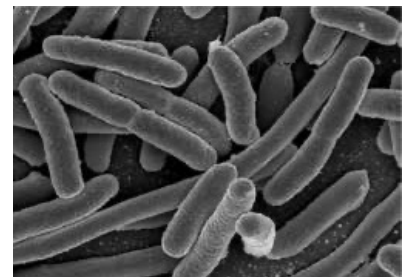
EzyDrain Continues to kill harmful bacteria 24/7 beyond the proven test result report at a higher kill rate



Staphylococcus Epidermidis



EzyDrain Testing Microbe Institute



Escherichia Coli

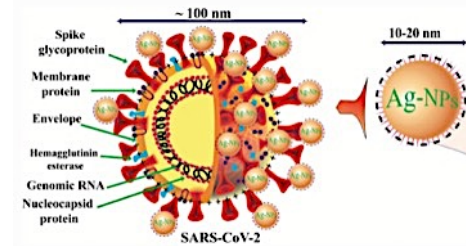
Scientists Discover AgNPs is effective against SARS-CoV2

Premium EzyDrain uses AgNP technology to kill harmful bacteria and prevent disease

Recent studies show the efficiency kill rate against SARS-CoV2 (Covid-19)

Ag is long known for its antimicrobial effect and the antiviral property of AgNPs is being extensively researched with renewed interest in the recent past. AgNPs effectively inhibits extracellular SARS-CoV-2 to protect the target cells from infection and the pseudovirus entry assay revealed that AgNPs interfere with viral entry. It has been consistently observed that AgNPs interact with the structural proteins on the surface of extracellular viruses to inhibit infection in the early phase, by either binding to genetic material preventing viral attachment or entry, or by damaging the surface proteins to affect the structural integrity of virions inhibiting their replication.

The main antiviral mechanism of action of AgNPs against SARS-CoV-2 is effectively inhibited viral entry step by either preventing viral attachment or interfere with viral entry, or by damaging the surface proteins to disrupt the structural integrity of virions. AgNPs can enter into cell cytoplasm and intracellular antiviral action by interacting with observed viral nucleic acids, and possibly due to the limitation of viral replication leading to inhibit serial viral infection of newly produced virus from infected cells to uninfected cells



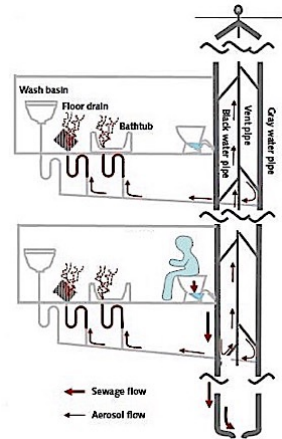
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7486059/>
<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0256401>
<https://nanoscalereslett.springeropen.com/articles/10.1186/s11671-021-03558-3>

Air borne Plumbing Disease Transmissions

Plumbing vents allow air borne disease to escape into the living spaces and infecting surfaces often touched in a hotel such as sinks, toilets, doors and fittings. COVID-19 (SARS) lives in sewerage for many days and poses a genuine risk for residents, guests or staff. Facilities are diligent in cleaning bathroom surfaces, but the unprotected floor vent transmissions pose a genuine concern and are often overlooked as a source of transmission, which can pose a threat even days after.

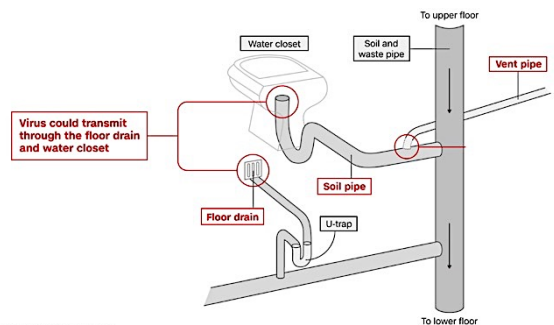
Bathrooms with exhaust fan systems increase the opportunity of infectious transmissions circulating escaping infectious air plumes from the floor waste vents into a living space.

EzyDrain is a reliable and effective pathogen barrier preventing the opportunity for infectious air plumes, bacteria or mould spores escaping into living spaces, reducing possible exposure or circulation of air borne transmittable diseases



COVID-19 spreads through sewage pipes

- In February 2020, health officials in Hong Kong partially evacuated residents from an apartment block over fears the coronavirus may have been transmitted via the building's pipes.
- Two residents living on different floors of a high-rise tower called Hong Mei House, in northwestern Hong Kong's Tsing Yi, had been infected with coronavirus.
- A 62-year-old woman was diagnosed with the virus about a week-and-a-half after a 75-year-old man in the same building became infected.
- In Hong Mei House, the two initial patients with coronavirus lived 10 floors apart, but were on the same vertical block of apartments



Source: CNN reporting
Graphic: Jason Kwok, CNN

- Ivan Hung, chief of the Infectious Diseases Division at Hong Kong University, told CNN that early studies of COVID-19 suggested it is present in faecal matter.
- Microbiologist Yuen Kwok-yung said that an improperly sealed pipe could have resulted in a virus transmission, by carrying infected feces into the building's ventilation system and blowing it into people's bathrooms.
- As the pipeline that transfers feces is connected to the air pipe, it is very likely for the virus in the feces to be transmitted through the air fan into the toilet.

<https://www.acpjournals.org/doi/full/10.7326/M20-0928?journalCode=aim&>
<https://www.acpjournals.org/doi/full/10.7326/M20-0928?journalCode=aim&>

EzyDrain Product Range

All EzyDrain products are a pathogen barrier to protect against air borne diseases escaping from floor wastes

EzyDrain is available in 2 product ranges which are: **Premium** (antibacterial ABS) or **Economy** (ABS)



Premium

Chemical Free *Antibacterial AgNP* ABS
Scientifically Proven Kill Rates
Product colour: **Blue**
Packaging: **Blister Pack**

RRP \$65



Economy

Made with recycled ABS
Eco Friendly
Product colour: **Slate**
Packaging: **Plastic bag & tag**

RRP \$44

EzyDrain Product Information



Premium Range

Product Code: TF100



Economy Range

Product Code: TF100e

Available in both:

Premium Range - Chemical Free and Anti-bacterial

Economy Range - Made with recycled ABS



100mm
Floor waste



100mm
plumbing pipe

EzyDrain 100mm Twin Fin

Fits pipe & floor waste size 95mm -105mm

Contents: 1 x 90mm flap top lid + 1 x 100mm Twin Fin soft base ring with fitting instructions and product card

The simple choice for obstructed or irregular pipe shapes

Premium bonus extra 2 O-rings included in pack



Premium Range

Product Code: HB90



Economy Range

Product Code: HB90e

Available in both:

Premium Range - Chemical Free and Anti-bacterial

Economy Range - Made with recycled ABS



90mm
Floor waste



90mm
plumbing pipe



100mm x 70mm
long neck

EzyDrain 90mm Hard Bottom

Fits pipe & floor waste size 86mm to 90mm and also 100mm x 70mm long neck waste

Contents: 1 x 90mm flap top lid and + 1 x base with 1 x gasket ring attached with fitting instructions and product card

Base can be glued into pipe securely for high-pressure areas



Premium Range

Product Code: MP100

Available only in:

Premium Range - Chemical Free and Anti-bacterial



100mm or 90mm
floor waste



90mm or 100mm
plumbing pipe



100mm x 70mm
long neck

Ezydrain Multi Pack

Fits pipe & floor waste size 86mm to 105mm.

Contents: 1 x 90mm hardbottom & 1 x 100mm twin Fin bases, 1 x flap top lid with instructions and product in blister pack

The 'one-stop' solution. Choice of 2 size fittings



Product Available For wholesale Purchases over 1000 units Only

Available in both: Wholesale only - Not Available for purchases Online



100mm
Floor waste



100mm
plumbing pipe

EzyDrain 100mm Hard Bottom

Fits pipe & floor waste size 100mm to 105mm



Fitting and Product Specifications

Product Installation

100mm Twin Fin – installed in one piece



1. Remove grill, tilt Twin Fin on 180o Angle
2. Push device past opening and into pipe
3. Tilt and level device until flat & even
4. Replace Grill

90mm Hardbottom – installed in two pieces



1. Separate into 2 pieces the base & lid
2. Insert base on 180o angle into pipe
3. Level the base flat using fingers into pipe
4. Insert flap lid & twist until locked
5. Replace Grill

EzyDrain is installed in under a minute

Floor Fittings and Styles

Pipe Sizes	Pipe Only	90mm x 20mm	100mm x 20mm	100mm x 70
90mm 3.5"	Recommended: EzyDrain 90mm Hard Bottom (HB90 & HB90e) Also suitable: EzyDrain Multi pack (MP100)	Recommended: EzyDrain 90mm Hard Bottom (HB90 & HB90e) Also suitable: EzyDrain Multi Pack (MP100)	N/A Also suitable: EzyDrain Multi Pack (MP100)	Recommended: EzyDrain 90mm Hard Bottom (HB90 & HB90e) Also suitable: EzyDrain Multi Pack (MP100)
100mm 4"	Recommended: EzyDrain 100mm Twin Fin (TF100 & TF100e) Also suitable: EzyDrain Multi pack (MP100)	N/A Also suitable: EzyDrain Multi Pack (MP100)	Recommended: EzyDrain 100 Twin Fin (TF100, HB100 & TF100e) Also suitable: EzyDrain Multi Pack (MP100)	Recommended: EzyDrain 90mm Hard Bottom (HB90 & HB90e) Also suitable: EzyDrain Multi Pack (MP100)

Product Specifications

Product	Base and Lid	Pin and Springs	O-Rings and Seals
Premium	ABS plastic with AgNP	304 Grade Stainless Steel	Nitrile with AgNP
Properties and Resistance to:	<ul style="list-style-type: none"> • Chemicals • Dimensional stability and high tensile strength and stiffness • Reduces bacteria and mould growth • Excellent high and low temperature performance 	<ul style="list-style-type: none"> • Ordinary rusting • Most food processing environments • Organic chemicals, dyes and most inorganic chemicals 	<ul style="list-style-type: none"> • Mineral oils and greases containing a mineral oil base • Reduces bacteria and mould growth • Fuels like gasoline, diesel and light heating oils • Animal vegetable oils and fats • Hot water
Economy	Recycled ABS	304 Grade Stainless Steel	Nitrile
Properties and Resistance to:	<ul style="list-style-type: none"> • Chemicals • Dimensional stability and high tensile strength and stiffness • Excellent high and low temperature performance 	<ul style="list-style-type: none"> • Ordinary rusting • Most food processing environments • Organic chemicals, dyes and most inorganic chemicals 	<ul style="list-style-type: none"> • Mineral oils and greases containing a mineral oil base • Fuels like gasoline, diesel and light heating oils • Animal vegetable oils and fats • Hot water