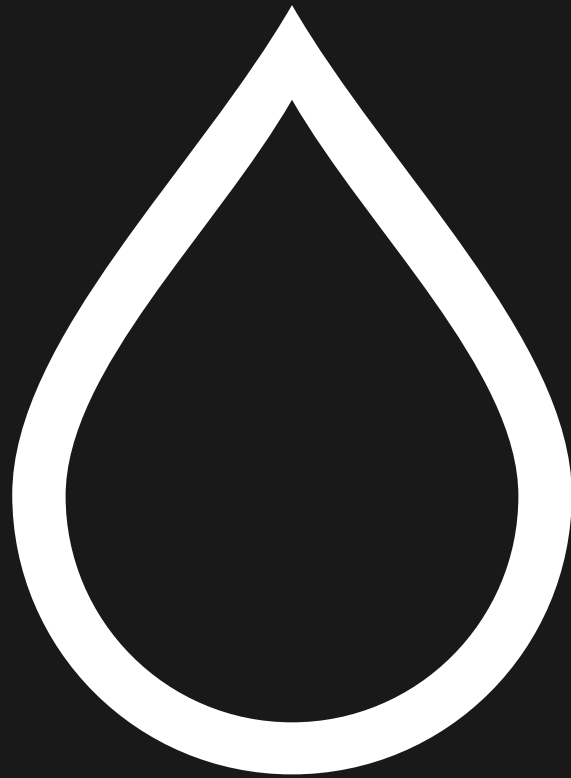


pure water



microlene



Why treat your water?

Unwelcome Organisms – Ultra Violet Treatment for Rainwater

Microscopic living organisms such as bacteria, mold, viruses and parasitic cysts (e.g. Giardia and Cryptosporidium) can thrive in untreated water supplies. Exposure to Ultra Violet light with the Microlene Aquashield system is a safe and very effective way to neutralise these unhealthy organisms from your drinking water.

Tainted Water – Filtration

Families seek different solutions; from simple taste and clarity issues through to a range of wider concerns. Water can be discoloured and tainted by dust, rust, sediment, algae, decaying organic matter and chemicals. It can also contain aluminum, lead, asbestos, chlorine and sediment.

Microlene's superior range of water treatment solutions can swiftly clear these impurities by passing them through the correct filtering option.

Hard Water – Water Softening

Hard water can mean hard work in the kitchen, laundry and bathroom. Microlene has a specific range of water softeners by Kinetico which remove excess levels of dissolved chemicals such as calcium, magnesium, manganese and iron.

This process delivers soft clean water that feels better, leaves clothes whiter and brighter and means you use less soap and detergent in your day-to-day washing.

Kinetico systems also reduce the build-up of scale in heated appliances, such as water heaters, dishwashers and washing machines, reducing the possibility of premature failure and costly repairs.

Families are more focussed than ever on making sure their water supply is safe to drink. The Microlene range of water treatment solutions has been developed over a period of 20 years. With the backing of Davey Water Products, itself a company with over 80 years of experience in water technology. Microlene is your premium source for Pure Water.

Our Pure Water Products

Premium 3 Stage UV System	5
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The proven
way to
pure water



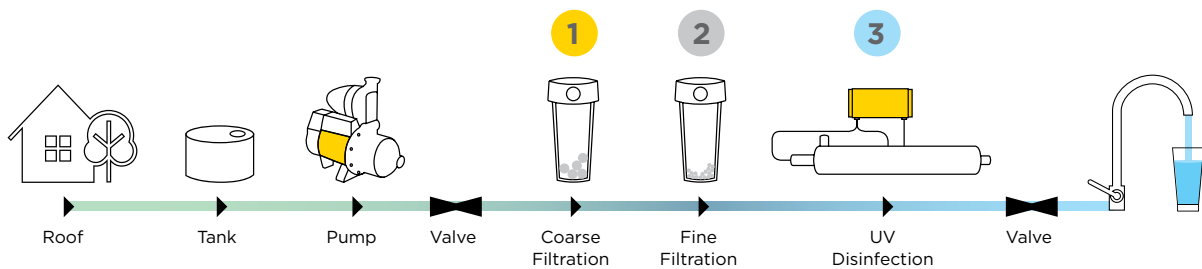
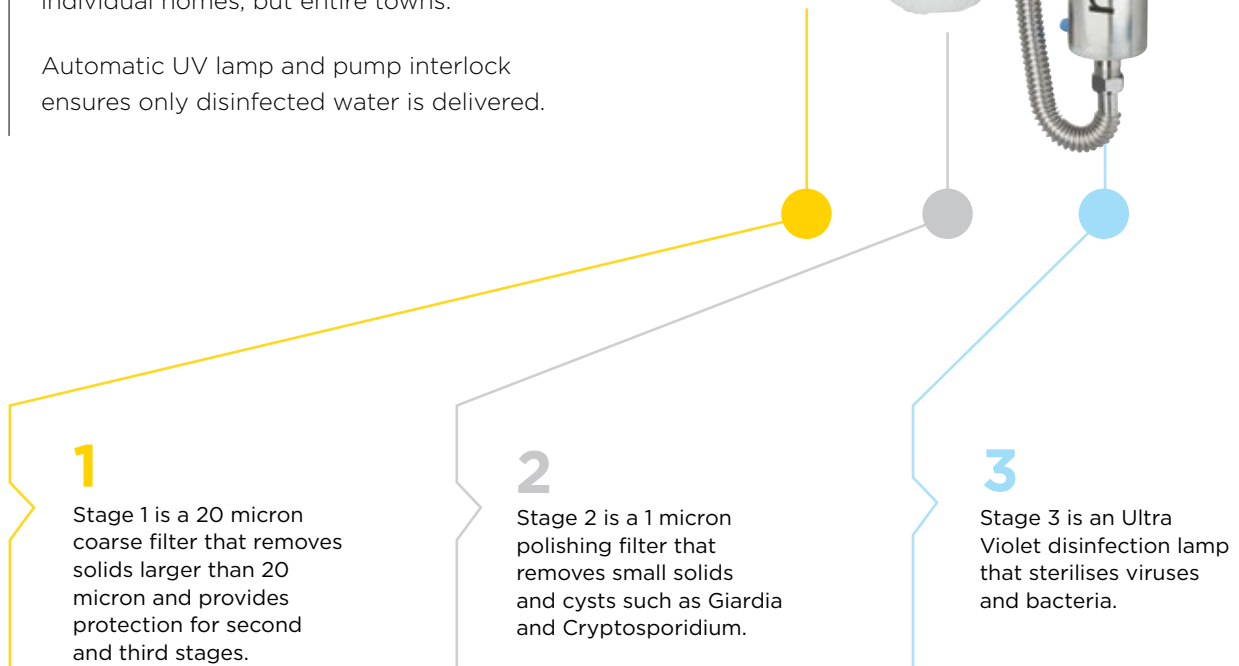
Microlene 3 Stage UV System

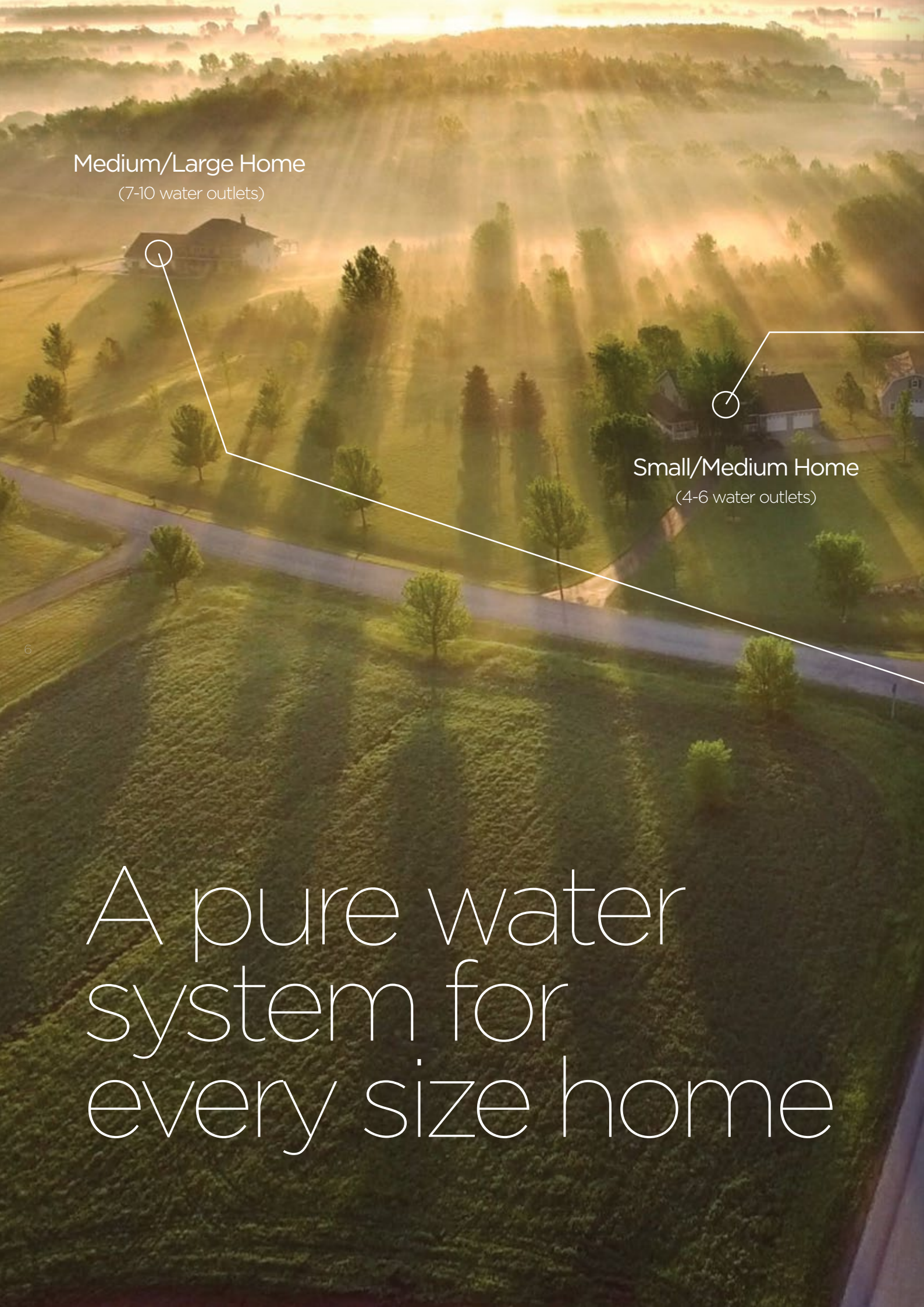
▼ Microlene Aquashield
Centurion UV System Kit

Microlene's proven three-stage Filtration and Ultra Violet disinfection systems can provide continuous clean, safe and fresh tasting water from your rainwater tank.

In conjunction with pre-filtration, UV treatment options are the best practical solution for treating drinking water and are widely used in disinfecting the drinking supplies of not just individual homes, but entire towns.

Automatic UV lamp and pump interlock ensures only disinfected water is delivered.





Medium/Large Home
(7-10 water outlets)

Small/Medium Home
(4-6 water outlets)

A pure water
system for
every size home

Filter Housing

Course Pleated filter

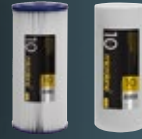
Fine Polyspun filter

UV Chamber

System



+



+



10J
KUV50



+



+



20J
KUV70



+



+



20J
KUV70



+



+



20J
KUV130

All-in-one Unit

- ✓ Pump + Controller
- ✓ Filters
- ✓ UV



DAVEY

Pump controller options include your choice of industry leading Torrium2, or our rainwater/mains interchange device, Davey RainBank.



The all-in-one unit

Urban/Rural

- ✓ Pump + Controller
- ✓ Filters
- ✓ UV

Microlene Steriflo UV disinfection unit. Helps make your captured tank water safer for drinking without the use of chemicals.

Davey 20 micron and 1 micron filters work together in series for maximum cartridge life and for effective reduction of cysts such as *Cryptosporidium* and *Giardia*.

Davey's AquashieldMAX system is an all-in-one pressure boosting and treatment system to pump rainwater to a home, guest house, school, or small commercial building.

An AquashieldMAX system is delivered, factory tested, completely assembled within a robust weather cover. It arrives ready to plumb into your water supply line, with easy connection to a standard 10amp power point.

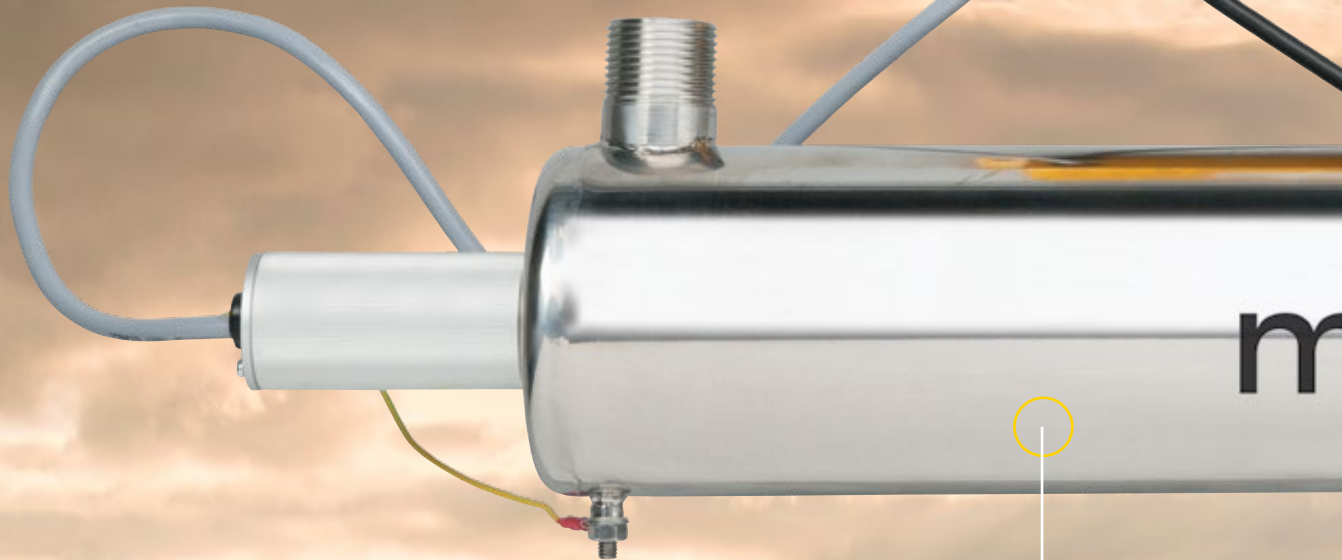
Our all-in-one system contains a Davey pump and controller, Microlene 2-stage filtration and Steriflo UV disinfection.

Pump controller options include your choice of industry leading Torrium2, or our rainwater/mains interchange device, Davey RainBank.

AquashieldMAX systems will handle flows up to 70 litres per minute.

Ultra Violet Water Treatment System for Rainwater Tanks

Urban or Rural



Microlene Steriflo UV Light and Chamber

An economical means of managing bacteria and viruses in drinking water supplies, best used with pre-filtration to ensure the highest penetration of UV light. Provides 30mJ/cm² at 90% or above UV Transmission (UVT).

Bird and animal droppings can contaminate your rooflines with micro-organisms such as viruses, bacteria and parasitic cysts leaving your water unsafe for drinking and has the potential to cause illness.



TIP:
Match the size of your UV to the flow rate of your pressure pump.

UV treatment does not leave any residual chemicals in your drinking water and it is not possible to overdose.



Microlene Steriflo systems generate Ultra Violet (UV) light at 254 nanometers, inactivating micro-organisms by damaging their DNA. Without the ability to reproduce they cannot cause infection in humans.

Passing filtered water through a Steriflo unit exposes the organisms living in your rainwater to a dose of UV light which is sufficient to inactivate the vast majority of common water-borne threats.



Microlene Filter Housings

The size of housing is determined by how many taps or appliances you want to provide water to. For a single tap, a standard 10" will suffice and for anything larger, a Jumbo 10" or 20". The most successful installation will have two filters set up in series so that a pre-filter of 20 micron captures the majority of the coarse dirt, shielding the second stage of filtration. This would typically be two Jumbo 10" or 20" cartridge filters installed on the main cold water line entering your house followed with a UV disinfection system. Cooking and drinking taps are then protected with a Standard 10" purification filter.

Microlene's filter housings are constructed from reinforced polypropylene for durability, are supplied with mounting brackets and hardware for easy installation and pressure relief valves on most models (for ease of cartridge removal).

Microlene Twin Housings

These are ready-to-install standalone dual housings, perfectly matched to Microlene's UV50 and UV70 Steriflo units.

KAS10J / KAS20J



Microlene Water Filters

Water can be discoloured and tainted by dust, rust, sediment, algae, decaying organic matter and chemicals. It can be cleared of these impurities once passed through a correctly selected Microlene cartridge element, producing sparkling, pleasant tasting and safe drinking water.

The correct selection of filter type to suit your application is important to economically achieve the desired water quality.

1st Stage Filtration

F1

Pleated Sediment Cartridges (PP Series)

Removal of sediment, rust and scale.

Pleated polyester cartridges offer reduced operating costs for many applications as the pleated construction allows them to be rinsed clean and reused. The cartridges have a high surface area and can handle high flows and debris loads.



2nd Stage Filtration

F2

Polyspun Sediment Cartridges (PS Series)

Removal of finer sediment, rust, sand, silt, algae and Cryptosporidium cysts.

These cartridges are pure polypropylene with no fillers, binders, adhesives or surfactants. They are ideal for food and drinking water use and any applications where high purity is important.





Microlene Special Purpose Filters

Dissolved impurities that affect the taste, odour and safety of your water can include chlorine, pesticides, herbicides, decayed organic matter and solvents. Microlene carbon cartridges are most effective at the kitchen tap.

Carbon Blocks

Effective combination cartridges capable of fulfilling the dual roles of filtration and purification reducing taste, odour, chlorine, pesticides, chemicals, Giardia and Cryptosporidium (0.5 micron options).

Special Purification Cartridges

To remove some dissolved impurities the use of special purpose purification cartridges is required.



Carbon Blocks (CB)

A combination cartridge fulfilling the dual roles of filtration and purification suitable for removing taste, odour, chlorine, pesticides, chemicals, cysts, sediment, Giardia and Cryptosporidium.

**ACBM10 / ACB10 / BPAC10 / SBPAC10 / MPACB20
MPACB10J / ACB10J / BPAC10J / MPACB20J**

Pleated Carbon Impregnated (PC)

Constructed totally of FDA grade materials, these cartridges have combination sediment and chlorine reduction capabilities. This means they can handle larger flow rates, whilst providing light duty carbon functionality.

PPAC10 / PPAC10J



Granular Carbon (GC)

Suitable for applications with low contamination levels and where removal of dissolved chemicals is needed. These high quality cartridges ensure performance by significantly reducing taste, odour, organics (including THMs), chlorine and pesticides.

AC10 / SAC10



Heavy Metal Reduction (HM)

Microlene dual action filters contain granular carbon as well as KDF oxidation/reduction to significantly reduce aluminium, lead, heavy metal contamination, taste, odour, chlorine, pesticides, organics and THMs.

KDC10



Fluoride Reduction (FR)

These dual action filters contain granular carbon as well as pre-conditioned Activall, a fluoride selective media. The cartridge can also reduce fluoride, arsenic, taste, odour, chlorine, pesticides and THMs.

AFAC10



Arsenic Reduction (AR)

Microlene arsenic reduction cartridges contain a ferric oxide media which can significantly reduce arsenic (III), arsenic (IV), zinc and most heavy metals.

ARC10



Water Softening Systems

Microlene Water Softeners – technology by Kinetico

Hard water is naturally occurring and contains excess levels of dissolved minerals such as calcium, magnesium, manganese and iron. Microlene's water softeners are an easy solution offering an uninterrupted supply of soft water to the home using a non-electric system.

The system backwashes without ever going offline for round the clock operation, no interruptions for regeneration. It also measures water use to precisely determine when it's time to regenerate, resulting in up to 20% less waste water and up to 40% savings in salt.



▲ Microlene Water Softener
Technology by Kinetico

How softening works

Excess levels of dissolved chemicals such as calcium, magnesium, manganese and iron are removed from water in a simple process called ion exchange.

1.

A resin bead bed inside the softener is loaded with sodium ions sourced from a concentrated brine solution.

2.

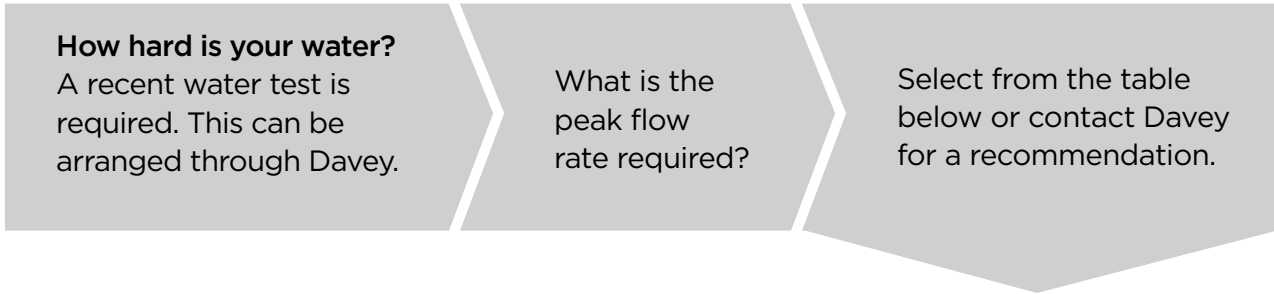
The hard water is passed over the resin beads attracting calcium and other minerals replacing them with sodium ions in the supply.

3.

Once the resin beads have reached maximum capacity, the system undertakes regeneration with a brine solution, flushing away the hardness and recharging the resin to begin the process again.

Selecting a System

The selection of an efficient softener for water requires matching these parameters to suit your application:



Microlene Water Softener System Selection Guide

Specifications	SUMOI*	KM2020CHF*	KM2025S	KM2060S	KM2060SOD
Peak Flow Rate	45 lpm	51 lpm	45 lpm	68 lpm	114 lpm
Service Flow Rate	35 lpm	34 lpm	30 lpm	44 lpm	78 lpm
Maximum Hardness	850mg/L	342mg/L	428mg/L	1129mg/L	513mg/L
Regeneration Time	18 minutes	11 minutes	29 minutes	45 minutes	45 minutes
Maximum Iron (ferrous)	0mg/L	0mg/L	2mg/L	6mg/L	6mg/L
Maximum Salt Use Per Regeneration	0.59kg	0.34kg	0.6kg	2.0kg	2.0kg
Maximum Litres Processed Before Regeneration	2687 lpm	2207 lpm	2771 lpm	4743 lpm	12000 lpm
Maximum Continuous Flow to Storage	N/R	N/R	30* lpm	44* lpm	79* lpm

*Mains water models only

Hardness	Total Hardness level mg/L CaCO ₂	Disc number / water produced between regeneration (litres) (Note: Does not apply to SUMOI)			
Moderately Hard	20-60	1 / 2,207	1 / 2,771	1 / 4,743	1 / 12,000
Hard	60-120	2 / 1,105	2 / 1,385	1 / 4,743	2 / 6,000
Very Hard	120-180	3 / 734	3 / 924	2 / 2,373	3 / 4,000
Very, Very Hard	180-250	4 / 553	4 / 693	4 / 1,185	4 / 3,000
Extremely Hard	Over 250	4 / 553	5 / 553	4 / 1,185	5 / 2,400

Note: Maximum litres assumes minimum hardness. Subject to disc selection - refer to technical datasheet

Special Water Treatment Systems



Auto Backwash Filters

For the removal of sediment and visible iron from disinfected water supplies, these come with macrolite media on a bed of gravel for superior filtration down to 5 micron and 32mm connections.

MACH2060FOD

Carbon Filters

Granular activated carbon filters for removing taste and odour from chlorine present in municipal supplies. With both manual and automatic models available, these filters also greatly reduce colour, organic chemicals, pesticides and herbicides.

ETFC9
ETFC12
EAFC9
EAFC12



Multimedia Filters

Microlene Multimedia Filters are an economic means of removing bulk particles from water supplies. With both manual and automatic models available, the filter bed is kept clean by regular backwashing to waste.

ETFM9
ETFM12
EAFM9
EAFM12



Neutralising Filters

These Microlene filters are used to increase the pH of water stored in plastic or fibreglass tanks. Low pH can be particularly corrosive to copper and brass often causing green staining and can prematurely destroy hot water cylinders.

**EXFN9 / EXFN12 / ETFN7 / ETFN9 /
ETFN12 / EAFN9 / EAFN12**





Treating Tank Water

Your tank water can become contaminated by a whole host of 'nasties' such as droppings (from birds and possums), stagnant water (caused by long spells of no rain), bio-film (from the build-up of organic matter) making it less attractive for mosquitoes. It's very important for the health of your drinking water and therefore your family that you treat it with a disinfectant.

Microlene's Acquasafe gives you a fast, easy, safe and cost effective way to protect your family from over 170 bacteria and viruses commonly found in rainwater. Simply pour Acquasafe into your tank (1 litre : 15,000 litres) and as it does its job it breaks down in to oxygen and water protecting your tank for up to 2 months before you have to re-dose.

19





Microlene Quick Connect Under Bench Systems

Reduce unwanted contaminants that affect the taste and odour of your drinking water with a Microlene purified drinking water system. Our cartridges last up to three years and are more cost effective than regular cartridges that require replacement every three to six months.

Microlene purifiers have been independently tested to remove 99.94% Cryptosporidium cysts and comply with AS/NZ 4348:1995 Domestic Water Treatment Appliances. There are two types: Urban (mains water) and Rural (rainwater).

Microlene Standard Connection Purifiers can be used as replacements for all under bench systems irrespective of brand.

Microlene Under Bench Kits include a high quality chrome benchtop tap, long life Microlene filter and full installation kit.

Our range covers suitability for purifying mains water (with KDF media for heavy metal and chlorine reduction) and for purifying rainwater (cyst reduction).



Microlene Quick Connect Under Bench System Kit
WaterMark Certified – License number 02596



microleone

Selection Tables

Note: Full technical datasheets
available online at microlene.com.au

Filter Product Selector

Element Style	Micron Rating	Washable & reusable	Pre-filtration	Sediment reduction
Poly Pleated Sediment (PP)	50	✓	✓	✓
	20	✓	✓	✓
	5	✓		✓
	1	✓		✓
Polyspun Sediment (PS)	20		✓	✓
	5			✓
	1			✓
Carbon Block (CB)	10			✓
	5			✓
	0.5			✓
Pleated Carbon Impregnated (PC)	10			✓
Carbon Block with Silver (CB)	0.5			✓
Granular Carbon (GC)	20			
Granular Carbon with Silver (GC)	20			
Heavy Metal Reduction (HM)	0.5			
Fluoride Reduction (FR)	5			
Arsenic Reduction (AR)	25			
Microlene Mains/Townwater (UB)	10-1			
Microlene Rainwater (UB)	10-1			

Taste reduction	Odour reduction	Cyst removal rating	Metal reduction	Chemical reduction	Chlorine reduction	Bacterio-static	Filter life (months)
							Clean & Reuse
		>99.9%					12
✓ ✓ ✓	✓ ✓ ✓	>99.9%		✓ ✓ ✓	✓ ✓ ✓		6
✓	✓				✓		3
✓	✓	>99.9%		✓	✓	✓	12
✓	✓			✓	✓		6
✓	✓			✓	✓	✓	12
✓	✓		✓	✓	✓	✓	12
✓	✓			✓	✓		6
			✓				
✓	✓		✓	✓	✓	✓	36
✓	✓			✓	✓		24

Flow Rate Guide - Filter Housings

Application	Outlets	Flow Range (lpm)	Housing
Point of Use		4 to 10	10" x 1/2"
Point of Use / Small House		4 to 50	10" x 3/4"
Whole of House / Medium House		10 to 100	10" Jumbo
Whole of House / Large House		40 to 200	20" Jumbo

Microlene Quick Connect Under Bench Systems

Part No.	Description	Flow Rate	Hygienic Life
URBAN (Mains/Town water)			
MPQCUBS	Urban Quick Connect Premium Under Bench Kit - 10 micron down to 1 micron filtration for water clarity. Includes Granulated Activated Carbon to improve taste and odour and KDF media to extend cartridge life.	4 lpm	30,000 litres or 3 years
MQCPP	Urban Quick Connect Premium Under Bench Replacement Purifier	4 lpm	30,000 litres or 3 years
MPUBS	Urban Standard Under Bench Kit - 10 micron down to 1 micron filtration for water clarity. Includes Granulated Activated Carbon to improve taste and odour and KDF media to extend cartridge life.	4 lpm	30,000 litres or 3 years
MPP	Urban Standard Under Bench Replacement Purifier	4 lpm	30,000 litres or 3 years
RURAL (Rainwater)			
MSQCUBS	Rural Quick Connect Premium Under Bench Kit - 10 micron down to 1 micron filtration for water clarity. Includes Granulated Activated Carbon to improve taste and odour.	4 lpm	10,000 litres or 2 years
MQCSP	Rural Quick Connect Premium Under Bench Replacement Purifier	4 lpm	10,000 litres or 2 years
MSUBS	Rural Standard Under Bench Kit - 10 micron down to 1 micron filtration for water clarity. Includes Granulated Activated Carbon to improve taste and odour.	4 lpm	10,000 litres or 2 years
MSP	Rural Standard Under Bench Replacement Purifier	4 lpm	10,000 litres or 2 years
Microlene Quick Connect Conversion Kit			
MQCCKP	Quick Connect Urban Conversion Kit - Includes Quick Connect head, fittings and Urban Premium Purifier	-	3 years
MQCCKS	Quick Connect Rural Conversion Kit - Includes Quick Connect head, fittings and Rural Premium Purifier	-	2 years
Microlene Benchtop Kit			
WMRBT1	Rainwater Benchtop Kit - 10 micron down to 1 micron filtration for water clarity. Includes Granulated Activated Carbon to improve taste and odour.	4 lpm	10,000 litres or 2 years
WRRC2	Replacement Benchtop Rainwater Cartridge	4 lpm	10,000 litres or 2 years

Note: To replace original Microlene cartridges, use new standard cartridges above *WMTRC1 use MPP *WMRRC1 uses MSP

Pleated Sediment Cartridges (PP Series) – 1st Stage Filtration

Single Unit Part No.	Micron (µm)	Max. Flow (lpm)
Suit 10" Standard Housings (10" x 2.5")		
50PP10*	50	48
20PP10*	20	45
5PP10	5	43
1PP10	1	41

Suit 20" Standard Housings (20" x 2.5")		
50PP20*	50	95
20PP20*	20	90
5PP20	5	85
1PP20	1	82

Suit 10" Jumbo Housings (10" x 4.5")		
50PP10J*	50	100
20PP10J*	20	94
5PP10J	5	90
1PP10J	1	88

Suit 20" Jumbo Housings (20" x 4.5")		
50PP20J*	50	200
20PP20J*	20	188
5PP20J	5	180
1PP20J	1	175

*Washable

Polyspun Sediment Cartridges – 2nd Stage Filtration

Part No.	Micron (µm)	Max. Flow (lpm)
Suit 10" Standard Housings (10" x 2.5")		
20PS10	20	34
5PS10	5	28
1PS10	1	27
Suit 20" Standard Housings (20" x 2.5")		
20PS20	20	67
5PS20	5	56
1PS20	1	54
Suit 10" Jumbo Housings (10" x 4.5")		
20PS10J	20	84
5PS10J	5	76
1PS10J	1	75
PSDG10J Dual Gradient	25 down to 1	38
Suit 20" Jumbo Housings (20" x 4.5")		
5PS20J	5	156
1PS20J	1	152

Carbon Blocks

Part No.	Micron (µm)	Optimal Flow Rate for Reduction
Suit 10" Standard Housings (10" x 2.5")		
ACBM10	10	3.8
ACB10	5	3.8
BPAC10*	0.5	7.6
SBPAC10**	0.5	3.8
Suit 20" Standard Housings (20" x 2.5")		
MPACB20	10	7.6
Suit 10" Jumbo Housings (10" x 4.5")		
MPAC10J	10	7.6
ACB10J	5	7.6
BPAC10J*	0.5	7.6
Suit 20" Jumbo Housings (20" x 4.5")		
MPAC20J	10	15.1

*BPAC cartridges are microbe reducing.

**SBPAC cartridges are microbe reducing with silver.

Pleated Carbon Impregnated

Part No.	Micron (µm)	Max. Flow (lpm)
Suit 10" Standard Housings (10" x 2.5")		
PPAC10	10	3.8
Suit 10" Jumbo Housings (10" x 4.5")		
PPAC10J	10	7.6

Granular Carbon

Part No.	Micron (µm)	Max. Flow (lpm)
Suit 10" Standard Housings (10" x 2.5")		
AC10	20	3.8
SAC10*	20	3.8

*SAC cartridges are silver impregnated

Special Purification Cartridges

Heavy Metal Reduction

Part No.	Micron (µm)	Max. Flow (lpm)
Suit 10" Standard Housings (10" x 2.5")		
KDC10	0.5	2.3

Fluoride Reduction

Part No.	Micron (µm)	Max. Flow (lpm)
Suit 10" Standard Housings (10" x 2.5")		
AFAC10	5	2

Arsenic Reduction

Part No.	Micron (µm)	Max. Flow (lpm)
Suit 10" Standard Housings (10" x 2.5")		
ARC10	25	2

Microlene Filter Housings

Part No.	Description	Inlet/Outlet	Max. Pressure (kPa)
W10	10" Standard for single tap (white)	½"	850
W10PR	10" Standard for single tap, with pressure relief	¾"	850
W10J25MM	10" Jumbo for small homes, with pressure relief and spanner (white)	1"	850
W20J25MM	20" Jumbo for medium to large homes with pressure relief and spanner (white)	1"	620
W20J40MM	20" Jumbo for medium to large homes, with pressure relief and spanner (white)	1½"	620

Microlene Twin Housings

Microlene Twin Housings – Filters purchased separately

Part No.	Description	Max. Pressure (kPa)
AS10J	10" jumbo housings	850
AS20J	20" jumbo housings	620

Twin Filter Housing Kit (FH)

Part No.	Description	Max. Pressure (kPa)
KAS10J	Dual 10" jumbo filter pack, 2x10" jumbo housing and filters	850
KAS20J	Dual 20" jumbo filter pack, 2x20" jumbo housing and filters	620

Steriflo Selection

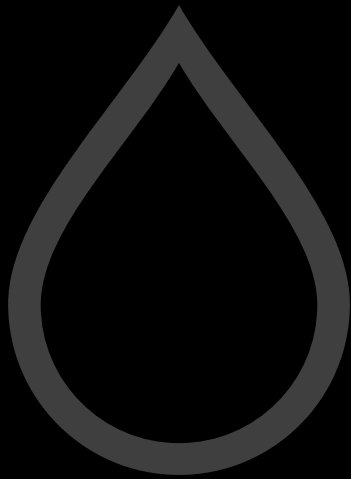
Part No.	Description	Inlet/Outlet
UV23	23 lpm to suit small homes	¾" NPT (M) / ¾" NPT (M)
UV50	50 lpm Steriflo to suit small to medium homes	¾" BSP (M) / ¾" BSP (M)
UV70	70 lpm Steriflo to suit medium to large homes	1" BSP (M) / 1" BSP (M)
UV130	130 lpm Steriflo to suit large homes or commercial properties	1 ½" BSP (M) / 1 ½" BSP (M)
UV250	250 lpm Steriflo to suit light commercial applications	2" BSP (M) / 2" BSP (M)

Water Softening Systems

Part No.	Description	Max. Iron (Ferrous)	Max. Hardness	Peak/Service Flow	Connections	Salt Included
KSUMOII	Mains single tank water softener (not suitable for iron removal)	0 mg/l	850mg/l	45/35 lpm	20mm BSPM	9 x 1.8kg block salt
KM2020CHF	Mains twin tank water softener – Includes 20 micron prefilter and bypass valve (not suitable for iron removal)	0 mg/l	342mg/l	51/32 lpm	25mm	9 x 1.8kg block salt
KM2025S	Water softener for medium water hardness – Includes 20 micron prefilter and bypass valve	2 mg/l	428mg/l	45/30 lpm	25mm	1 x 25kg
KM2060S	Water softener for high water hardness – Includes 20 micron prefilter and bypass valve	6 mg/l	1129mg/l	68/44 lpm	32mm	5 x 25kg
KM2060SOD	High flow water softener for medium water hardness – Includes 20 micron prefilter and bypass valve	6 mg/l	513mg/l	114/78 lpm	32mm	5 x 25kg

Treating Tank water

Part No.	Description	Treats
AS-1	Acquasafe 1 litre	15,000 litres
AS-5	Acquasafe 5 litre	75,000 litres
AS-25	Acquasafe 25 litre	375,000 litres
AS-TS*20	20 Acquasafe Test Strips	



microlene.com.au | 1300 232 839

microlene.co.nz | 0800 654 333