

Sustainable Potable Water Solutions for Humanitarian and Disaster Relief

www.skyjuice.org.au







Who is SkyJuice Foundation?

The SkyJuice Foundation is a not-for-profit organisation incorporated in Australia. The Foundation's charter is to provide low cost, sustainable water treatment solutions for humanitarian programs and emergency and disaster relief efforts.

Who do we work with?

SkyJuice Foundation works with an alliance of partners in the public, private and community sectors. We have a variety of working partnerships with NGO groups such as Oxfam, World Vision, Red Cross, UNICEF, Rotary and others. SkyJuice enjoys the support of committed volunteers around the world to assist in the delivery of safe water projects.

What we do

SkyJuice Foundation uses world's best low pressure membrance technology to produce safe, sustainable potable water supplies that are affordable and appropriate to communities in developing contries.

How does the SkyHydrant work?

- The ultrafiltration (UF) membrane provides complete physical filtration as well as disinfection
- The system operates under gravity with a minimum head pressure of 1 metre
- The membrane consists of thousands of microporous hollow fibres
- The membrane removes bacteria, protozoa and pathogren greater than .04 micron
- No chemicals, coagulants, pumps or energy are required for the filtration process
- Cleaning process is simple and manual. Drain down concentrate is completely organic.

Why is the technology unique?

- The SkyHydrant water filtration unit produces safe potable water without the need for power or chemicals
- The SkyHydrant is low cost, lightweight (13kgs) portable and easy to deploy in the field
- The UF membrane is robust, cleanable and has a service life in excess of 10 years
- Operation functions are simple and manual, with no consumables
- Safe water for less than \$1 per person per year
- Designed to produce water for 500-1000 people as stand alone unit, or can be configured for larger capacity. A single unit can produce up to 1000 litres per hour.
- Potable water can be produced from the majority of non-saline surface and ground water.
- SkyJuice Foundation has supplied more than 5,000+ units in 68 countries wroldwide

System specification

Membane material	PVdF
Membrane pore size (μm)	0.04
Maximum recommended feed particle size (µm)	500
Maximum recommended feed turbidity (NTU)	500
Filtered water turbidity (NTU)	<0.1
Log reduction value for particles 2-5 µm (LRV)	>4
Minimum recommended differential pressure	0.5 m
Maximum recommended differential pressure	4.0 m
Nominal minimum capacity (litres per hour)	400
Nominal maximum capcity (litres per hour)	1000

