

How to use *KilFire*

Made in Australia

MIXING INSTRUCTIONS FOR:-

KilFire **NEW EZYMLX Powder**

KilFire **Extinguisher & Knapsack Vials Powder**

KilFire **Ready to Use-RTU 1+ 2 Litre & Bush Black Liquid**

KilFire **Shotpack kit Liquid**

KilFire **Professional 0.1% Liquid**

KilFire **Aviation Liquid**

KilFire **Penetrator Liquid**

Steps, How it Works, is it safe & Examples.

Caution: *Kilfire* is NOT to be used on electrical fires.

Kilfire is produced by Benign Technologies Perth Western Australia, All products that are produced by the BENIGN-TECH GROUP are benign to the environment and safe to use, Kilfire for example was accepted by authorities as a non-chemical Soil Conditioner/Stabiliser, all unused or out of date product can be watered down 6 times above the recommended rate and used in the Garden, Plants, Trees, Veggie Patch, Turf or Lawn. Kilfire powders and liquids are also accepted for use by Fire Authorities in fragile-sensitive wetland-Bushland areas and mixed in drinking water tankers.

Manual mixing Instructions for *KilFire NEW EZYMLX*

Powder” Incorporating extinguisher & Knapsack Vials, the powders are available in all sizes to suit all size tanks, both Domestic & Commercial.

Note:- *Kilfire* Liquids Manual *mixing method are similar, the total volume of water used is reduced-Refer to quantities on container label.*

KilFire Professional 0.1% Liquid Mixing rate is 1000 Litres to 1 Litre of Kilfire.

Can be applied manually into the incoming water stream while filling your tank and mix by agitation or through most commercial Venturis, Dosing Systems & around the pump proportioners.

Intense fires as Fuel, Oil, Shale or Ethanol can be controlled quickly by mixing a rate of 1000 litres of water to 2 Litres of *Kilfire Professional 0.1% Liquid*

Kilfire NEW EZYMLX Powder

Mixing instructions (Example) 1 x 200 gm container of ***KilFire NEW EZYMLX*** Powder into 600 Litres of water.

Note: 9 litre (3 ml) extinguisher vials cannot be used in Knap-Sack sprays.
These vials are designed for 9 litre Fire extinguishers only.
KS-2 & KS-6 are specifically used for 16 Litre Knapsack sprays, best hint is to pre-mix 1 x 3.3 grams into 16 litres of water in a 20 litre drum and use as required, this method reduces the overall weight being lifted and carried.

1. Fill tank to a third full with water.
Brackish water is ok, but if a salt content is present it will lower the performance.
KilFire NEW EZYMLX Powder is not recommended for use with Sea Water. Where Sea Water is to be used it should be in conjunction with ***KILFIRE Professional 0.1% Liquid*** and delivered using a standard venturi / induction system at a 250/1 Ratio.

**Manufactured Packed Sizes are clearly marked with water volumes
CAN BE WATERED DOWN 50% WHEN COMBATING GRASS OR
SCRUB FIRE BREAKS.**

KFP130	130gm	Treats	400	to	800	Litres
KFP165	165gm	Treats	500	to	1000	Litres
KFP200	200gm	Treats	600	to	1200	Litres
KFP265	265gm	Treats	800	to	1600	Litres
KFP330	330gm	Treats	1000	to	2000	Litres
KFP500	500gm	Treats	1500	to	3000	Litres
KFP800	800gm	Treats	2400	to	4800	Litres
KFP1000	1 Kg	Treats	3000	to	6000	Litres
KFP2000	1 Kg	Treats	6000	to	12000	Litres
KFP4000	4 Kg	Treats	12000	to	24000	Litres

2. While the water is continuing to fill the tank, gradually pour/sprinkle the ***KilFire*** powder into the incoming stream of water. **Note: Do not dump all of the powder as a solid mass from the can into the water as it will effect mixing and product potency.**
3. At the same time as the water is filling into the tank it should be recirculated to create an agitation to mix ***KilFire*** into a viscous solution.

4. Once the tank is full, *KilFire* is ready to use.
 - 4a Material can remain in the tank for as long as required as it is non-toxic and non-corrosive. (*Many frogs have been seen living in it*) Recirculate and agitate for a short time before reusing.
 - 4b. Once the initial fifty percent of the mixture has been used up it may be topped up without the necessity of adding more *KilFire* powder (**This can be done with Powder only-Not Liquid**). This mixture is still potent enough to extinguish a car fire.
 - 4c. All given rates of *KilFire* to water are classified to be used on Class A fires. **Not electrical.**

The added benefit is that at a full strength mix ratio it is also able to extinguish other fire sources quickly: Tyres, Shale, Engine Oil, Canola Oil, Fuel, and Magnesium together with underground Gas, Peat and Coal fires. Potential fires in picnic grounds, BBQ's and metal grinding/welding can be prevented by treating the grass or scrub arrears prior
 - 4d. *KilFire* Powder applied to porous materials such as paper, cardboard, un-oiled/treated timber, trees will have difficulty in re-igniting, the powder can also can be used as a safety precaution to rapidly drop the temperature of solar heating panels from approximately 600 Deg by spraying on the panels in the threat of fire.

Best application results are accomplished by lobbing a cone shaped spray onto the area. This will allow greater coverage faster; while at the same time the spraying of the material acts as a shield from the heat for greater protection to the Fire-fighters. Moving on from the treated area the flame will extinguish itself.

In the event of being threatened by a grass or bush fire, or to eliminate the necessity to burn back prior to an approaching fire.

Use either the full strength mixture or as in 4b. – add water to a previous mixture and re-agitate. It can then be used as a retardant to grass borders or tree tops; preventing the fire from spreading.

5. Once *KilFire* has been applied, it is highly unlikely that any re-ignition will occur. Eliminating the necessity for mopping up.
6. The cleaning or rinsing out of hoses or pumps is not required but is always good practice.

KILFIRE RTU Kits *Liquid*.

The **(Ready to use) RTU Kits** have been primarily designed for domestic use and the hobby farmer; nevertheless they also provide a useful adjunct for farmers and professional Firefighters. Clipping the kit onto the end of a standard garden hose; or a hose line off a Pump/Tank, a one litre unit with around 700 Ltr of water passing through it will last around 20 minutes. It is easily handled by all age groups offering the capability of retarding in front of, or extinguishing a running grass/brush or hay bail quickly.

This RTU Liquid is also known as bush Black and available in 20 Litre Commercial quantities which are suitable for existing venturi's and proportioners

KILFIRE Professional 0.1% *Liquid* has a much higher potency and knockdown value and can be mixed manually or adapted to existing foam systems – induction systems fitted to most Fire Tankers or Appliances. Good practice is to flush the system through before filling the reservoir/supply tank from a 1, 2, 4, 10 or 20 litre ***KilFire*** container. As the ***KilFire*** fluid is none corrosive, it has the added advantage that it can be left in the system indefinitely and used as required. Bulk quantities over 20 litres and up to 1000 litre IBC's can held in stock by request and delivered Via ***Kilfire Express***
Recommended mixing Ratio is:- 1,000/1 Litre and can be as high as 250/1 Litre.

Important note:- The Professional & Aviation liquids are more powerful in fire illumination, the powder is also extremely powerful, however the powder is more acceptable as a retardant.

KILFIRE Aviation & Extreme *Liquid* has minimum evaporation, enabling aerial Firefighters to operate at higher and safer altitudes than before and better regulate spraying to enable longer flight periods and provide greater coverage. Sighting of previous applications (when applied with a tracer) becomes easier, enabling delivery to be accomplished with much greater accuracy and effect.

An extremely high potency Liquid Concentrate specifically designed for Aerial Water Bombers and professional Fire Fighters in very difficult and inaccessible fires such as Oil/Canola, fuel, Plastics, Chemical, Shale, Peat and Spinifex plants Wild Fires Etc.

A Kilfire approved /Licensed dosing attachment is required for correct mixing.

Method of application:

Applied by a licensed and **KilFire** approved 'Dosing System'. **KilFire** is mixed in an agitation tank prior to air departure at a ratio of 1:1000 Ltr of water.

To act as a retardant (to stop ignition) it is applied at a rate of 1 Ltr of mix per square meter.

To extinguish a general bush & forest fire or for delivery at the fire face, it is applied at a rate of 3 Ltr of mix per square meter.

All mixing for aviation materials must be pre-mixed on the ground prior to filling the aircraft. Laws do vary in different countries

Peat and Speciality Fires: Application is recommended at a rate of 3 Ltr to 6 Ltr per square meter.

Important note: When extinguishing Peat fires without the presence of surface water, it is recommended that an application of **KilFire Penetrator** is applied prior to the treatment of **KilFire Aviation & Extreme, KilFire A 300 Powder or KILFIRE Professional 0.1% Liquid** This should be at a rate of 10 to 20 mls per 3 Ltr of water and applied at a rate of 3 Ltr per square meter. This will encourage the soil to open up and allow the chosen **KilFire product** to sink deeper and faster and by as much as 3 metres in an hour, suppressing the availability of oxygen to the fire.

Kifire (Aust) is an international licensed division based in Australia , with the expertise in extinguishing underground coal and Peat fires

KilFire

Systems under Research & Development:

- ★ **Escape system for trapped personnel and attack units.**
- ★ **Replacement of existing sprinkler systems to significantly mitigate water damage.**
- ★ **Airfield sprinkler systems designed to prevent the fires and explosions associated with landing distressed aircraft.**
- ★ **Misting in Engine rooms for Industrial & Shipping applications that will be highly effective and none hazardous to operatives.**
- ★ **A powerful web mister through which smoke and fire will not penetrate. Smoke is forced downward enabling personnel to more easily escape.**
- ★ **A thin line easy to operate 440 gm Pressure pack can, designed to eliminate Fat Fires with the added benefit of general fire control .**
- ★ ***KilFire* Agroflood is a granule designed to eliminate underwater peat fires.**

In what form is *KilFire* available?

All *KilFire* products are Formulated & Manufactured in Western Australia. They are available in powder and liquid form and in different size containers to suit numerous applications from Aerial Fire fighting to domestic Knapsack Sprays.

What is *KilFire* made from?

A food grade Acrylic Polyacrylamide, made up of Organic-Aliphatic Polymers and Acrylic polymers, originally derived from organic crude oil and made inert in a process similar to that used in drinking water processing: *KilFire* is then watered down with 1000 to 3000 parts water.

