

RemActiv™ Bioremediation Enhancer

RemActiv accelerates the bioremediation of Total Petroleum Hydrocarbons (TPH) in soil.

RemActiv contains natural surfactants and a specially formulated nutrient mix that result in faster remediation times and cheaper processing costs.

RemActiv is supplied as a liquid concentrate (20:1) and can be simply applied using a water truck or hand sprayer.

RemActiv has been independently proven and used at a number of sites with outstanding results by the likes of Pacific National and Fortescue Metals Group (FMG). Most recently, RMIT University evaluated the efficacy of bioremediating TPH using RemActiv, their findings summarised in Figure 1 showed a 50% increase in degradation of TPH over a 28 week period using RemActiv vs natural attenuation.

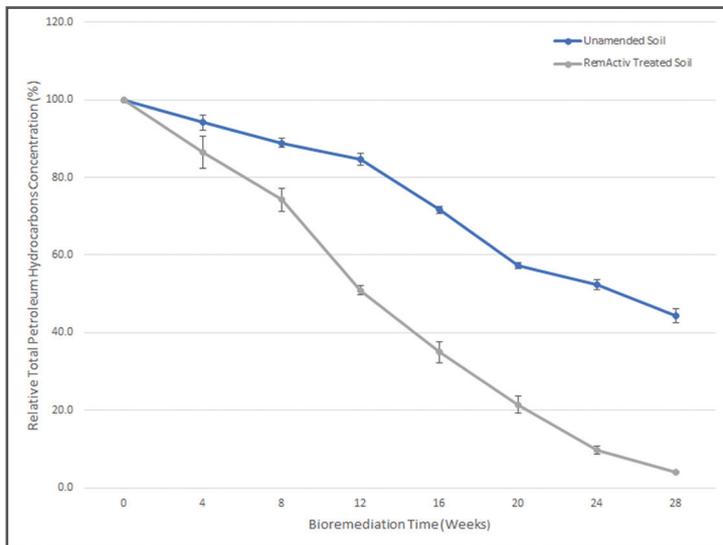


Figure 1: RMIT University study showing a 50% increase in degradation of TPH using RemActiv vs natural attenuation

Table 1: Nutrients designed for stimulating and enhancing the growth of local/indigenous micro-organisms

Element	%
Nitrogen	20
Phosphorus	2
Potassium	1
Sulphur	2.4
Zinc	0.5
Calcium	0.4
Manganese	0.4
Magnesium	0.2
Iron	0.1

Benefits

- Faster bioremediation times
- Easy and quick to apply
- Cheaper than standard fertilizers
- Reduced freight costs

Features

- Convenient liquid concentrate (20:1)
- Available in 20L, 200L or 1000L containers
- Nutrients optimised for microbial growth
- Used to degrade aliphatic and aromatic hydrocarbons

Applications

- Bioremediation
- Emergency spill response
- Biofarming
- Organic waste treatment

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Specifications

Shelf Life, Storage, Transport, Handling and Safety

- Shelf life: Unlimited
- Storage: Keep out of direct sunlight
- Temperature tolerance: 2 to 50°C (storage and use)
- Mix well before use
- Classified: Non Dangerous Good – Non Hazardous
- Precautions: S25 – use protective eye wear and gloves when handling
- Safety - It is the user's responsibility to handle and apply RemActiv safely. Please refer to SDS.

Application Rates

Suggested application rates described in Table 2 are for the diluted form of RemActiv.

The recommended dilution rate for RemActiv is 1:20 with non-chlorinated water; however some users have reported success with dilution rates as low as 1:100.

In certain cases where low dose rates over a given area are required, it may be easier to achieve even and consistent application by using higher rates of dilution.

Application rates referred to in Table 2 are suggested as a guide only. Many site variables will impact upon the application rate and on-going use should be adjusted according to analytical results obtained during the bioremediation process.

Important Site Parameters for Successful Bioremediation

- Soil type, porosity and moisture content
- Type and level of contaminants
- Regulatory targets
- Available oxygen
- Consistency and method of application

Table 2: Application Rate Guide

Application	Contamination	Dilution Rate: 1:20
Land farms	Low	0.5 L/m ²
	High	3.0 L/m ²
Biopiles	Low	10 L/m ³
	High	75 L/m ³
Spill	Low	0.25 L/m ²
	High	1 L/m ²



RemActiv being used at a Biofarm