



PRODUCT SPECIFICATION SHEET

Wood Vinegar (Pyroligneous Acid)

1. Product Identification

Product Name: Southland Carbon Wood Vinegar
Other Names: Pyroligneous Acid, Wood Distillate
Supplier: Southland Carbon Limited
Address: The Brickworks, 1257 Waipahi Highway, Pukerau 9772, New Zealand
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Emergency: +64 21 465 067
Website: www.southlandcarbon.co.nz

2. Product Description

Southland Carbon Wood Vinegar is a natural liquid condensate produced during the controlled pyrolysis of untreated wood biomass.

It contains a complex mixture of organic acids, phenols, and bioactive compounds that provide antimicrobial, soil-enhancing, and plant-stimulating properties.

Produced alongside biochar at Southland Carbon's Pukerau facility, it is derived from 100% untreated, virgin plant material.

3. Typical Composition

Component	Typical Range
Pyroligneous Acid	98%
Phenolic Compounds	<2%

Note: Composition may vary slightly depending on feedstock and process conditions.

4. Physical & Chemical Properties

Property	Specification
Appearance	Brown to dark brown liquid
Odour	Smoky, vinegar-like
pH	2.5- 3.0
Density	1.005 - 1.050 g/cm ³
Solubility	Fully miscible in water
Boiling Point	~100°C
Flash Point	Not classified as flammable

5. Key Functional Properties

Envigorate Wood Vinegar may assist with

- Antimicrobial action (bacteria, fungi)
 - Odour reduction (ammonia and organic waste)
 - Plant growth stimulation at low concentrations
 - Detering Insects
 - Enhancing Soil microbe populations
 - Supporting nutrient cycling
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6. Recommended Uses

Agriculture

- Foliar spray (diluted)
- Soil conditioning
- Compost enhancement
- Effluent and odour control

Livestock Systems

- Bedding treatment (odour & pathogen control)
- Shed sanitation
- Fly and mite management (diluted application)

Horticulture

- Root growth stimulation
 - Fungal suppression
 - Plant health improvement
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7. Application Guidelines (Typical)

Application	Dilution Rate
Foliar spray	1:200 - 1:500
Soil drench	1:100 - 1:300
Compost activation	1:50 - 1:100
Odour control	1:20 - 1:50
Animal housing	1:50 - 1:200

Always trial on a small area before full application.

8. Safety & Handling

- Avoid contact with eyes and skin (acidic liquid)
 - Use gloves and eye protection when handling concentrate
 - Do not ingest undiluted
 - Ensure adequate ventilation during use
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9. Storage & Shelf Life

- Store in sealed containers
 - Keep out of direct sunlight
 - Store below 30°C
 - Shelf life: 24 months when stored correctly
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10. Quality & Compliance

- Produced from untreated biomass only
 - Manufactured under controlled pyrolysis conditions
 - No synthetic additives or chemicals introduced
 - Suitable for agricultural use when applied as directed
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11. Environmental Information

- Biodegradable
- Low environmental persistence
- Avoid direct discharge into waterways in concentrated form

12. Packaging Options

- 1L containers
- 20L containers
- 1,000L IBC

13. Disclaimer

This product specification provides typical values and guidance only. Performance may vary depending on application method, environmental conditions, and dilution rates. Users should conduct their own trials to determine suitability for specific applications.
