



# Carbonaceous Backfill Data Sheet

Carbonaceous backfill or earth contact backfill is used to surround buried impressed current cathodic protection anodes. The backfill increases the effective size of the anode giving a lower resistance to earth and is consumed at a predictable rate from the current discharge.

PML supplies two principal Backfill types:

## Metallurgical Coke Breeze for use in horizontal and shallow vertical groundbeds

Coke breeze is porous and provides a large volume to weight ratio, decreasing the resistance to earth and delivering a large volume for a long life groundbed. Coke Breeze can be supplied with a slaked lime addition to reduce moisture loss.

## Calcined Petroleum Coke for use deepwell or borehole groundbeds

Calcined petroleum coke with small spherical grains is suitable for deepwell applications as it enables gas to escape and with a surfactant addition it can be mixed with water to create a slurry which can then be pumped into the borehole. With a high bulk density the petroleum coke sinks to the bottom of the hole.

## Typical Chemical Analysis

	Coke Breeze	Calcined Petroleum Coke
Fixed Carbon	85-86%(Dry)	99.2%
Ash	12%	0.3%
Sulphur	1.5%	1.0%
Volatiles	1.5%	0.3%
Moisture	10%	0.3%

## Physical Characteristics

	Coke Breeze	Calcined Petroleum Coke
Particle Size	0-10.0mm	0.1-1.0mm
Bulk Density*	750Kg/m <sup>3</sup>	920Kg/m <sup>3</sup>
Resistivity	50Ohm cm (Max)	0.1 Ohm cm (at 150psi)

\*Material will compact in transit. Bulk Density figure stated can vary by plus or minus 10%

## Packaging

Backfill is supplied in 25 kg poly bags, stacked on pallets and shrink wrapped. Also available in 1 tonne bulk bags.

## Pipeline Maintenance Limited

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