



## **Information Sheet 4**

### **Activated Carbon Analysis**

#### **Why Test Activated Carbon?**

Activated carbon is tested as a virgin product to ensure that your carbon supplier is providing you with the carbon that you specified, or as an in-use product to determine the loading on the activated carbon and predict its residual bed life. Activated carbons from various suppliers, raw materials and activation methods can influence carbon performance – Research Laboratory Services can evaluate different activated carbons in your matrix of interest and recommend the most effective carbon for your application.

Research Laboratory Services provides an independent testing service for activated carbon for most ASTM and DIN standards.

#### **What is the Carbon Tested For?**

The following analyses are routinely conducted by RLS:

<b>Sample Description</b>	<b>Method Ref</b>
Iodine Number	ASTM D4607
Apparent Density (GAC)	ASTM D2854
Moisture Content	ASTM D2867
Particle Size GAC	ASTM D2862
Particle Size PAC – laser refractometer	AS 4863.1
Ash Content	ASTM D2866
Acid (or Water) Soluble Ash (Metals)	ASTM D6385
pH change of solution due to carbon	ASTM D6851
pH of carbon	ASTM D3838
Water-extractable metals (GAC)	DIN EN 12902
Water-extractable metals (PAC)	DIN EN 12902
Acid soluble material	DIN EN 12902
Water soluble material	DIN EN 12902
Ball Pan Hardness (Ro-Tap)	ASTM D3802
Volatile Matter Content	ASTM D5832
H <sub>2</sub> S Breakthrough Capacity	ASTM D6646
Aqueous Isotherms	ASTM D3860
MIB and Geosmin Reduction – PAC	AWWA B600
Gold Adsorption Capacity and Kinetic	In house

Other tests available on request. Please contact us for pricing.

### **Skills and Experience of RLS**

Research Laboratory Services has been providing AC analysis to water customers in Australia for over 5 years. Almost all full scale BAC plants in Australia have at some stage been analysed by RLS. This analysis provides RLS with a unique data base of carbon from drinking water, reclamation/sewerage, industrial water, mine water and various pilot plants allowing RLS to compare your specific plants data with similar plants around the country. With over 15 years experience in water testing and water treatment plant optimisation you can be assured that you receive comprehensive interpretation of results and how they relate to your specific project.

In addition to providing AC analyses for the water industry, RLS also conducts routine analyses and data interpretation for the gold mining industry by evaluating activated carbon samples from various stages of the CIL process and evaluating their effectiveness.

### **Contact Details**

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