



ACIRS Product Catalogue

February 2025

www.acirs.com.au



WHAT'S NEW FROM ACIRS?

LATEST RELEASES

ACIRS-A2-2024

ACIRS-H10-2024-Lot#1

Australian Coal Industry Reference Samples (ACIRS)
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ACIRS COAL MATRIX REFERENCE MATERIALS

- **General Coal RMs:** ACIRS-G10-2022
- **Sulfur RMs:** ACIRS-S2A-2020, ACIRS-S2B-2015, ACIRS-S2C-2023 and ACIRS-S2D-2016
- **Trace Elements in Coal RMs:** ACIRS-M2-2018

Parameter	ACIRS-G10	ACIRS-M2	ACIRS-S2A	ACIRS-S2B	ACIRS-S2C	ACIRS-S2D
Ash, % d	10.51	9.32	-	-	15.10	18.02
Total Sulfur, % d	0.606	-	0.433	0.692	1.230	2.877
Chlorine, % d	0.052	-	-	0.027	0.0086	-
Phosphorus, % d	0.020	0.1109	-	-	0.0352	-
Relative Density, d	1.379	-	-	-	-	-
Fluorine, mg/kg d	76	176	-	37	94	-
Mercury, mg/kg d	0.029	0.041	-	0.057	0.111	-
Volatile Matter, % d	19.79	-	-	-	-	-
Gross Calorific Value, MJ/kg d	32.331	-	-	-	-	-
Total Carbon, % d	79.45	-	-	-	-	-
Hydrogen, % d	4.365	-	-	-	-	-
Nitrogen, % d	1.801	-	-	-	-	-
Carbonate Carbon, % d	0.032	-	-	-	-	-
Selenium, mg/kg d	-	0.3	-	-	-	-
Arsenic, mg/kg d	-	0.3	-	-	-	-

ACIRS-G10-2022	(125 g)	Price: \$250.00	
ACIRS-S2A-2020	(125 g)	Price: \$200.00	
ACIRS-S2B-2015	(125 g)	Price: \$200.00	Price in AUD excluding GST and delivery costs
ACIRS-S2C-2023	(125 g)	Price: \$300.00	
ACIRS-S2D-2016	(125 g)	Price: \$200.00	
ACIRS-M2-2018	(50 g)	Price: \$155.00	

ACIRS-G10-2022, ACIRS-S2C-2023, ACIRS-H10-2024-Lot#1 and ACIRS-A2-2024 have been certified under ACIRS' recently acquired ISO 17034 NATA scope of accreditation.

ACIRS COAL ASH REFERENCE MATERIAL

ACIRS-A2-2024

ACIRS-A2-2024			
Ash Analysis Parameters		Ash Fusibility Parameters	
SiO ₂ wt%, d	58.0	Reducing Temperatures °C	
Al ₂ O ₃ wt%, d	26.0	Deformation	1310
Fe ₂ O ₃ wt%, d	8.8	Spherical	1370
CaO wt%, d	2.61	Hemispherical	1400
MgO wt%, d	1.03	Flow	1480
Na ₂ O wt%, d	0.36	Oxidising Temperatures °C	
K ₂ O wt%, d	0.90	Deformation	1430
TiO ₂ wt%, d	1.42	Spherical	1460
Mn ₃ O ₄ wt%, d	0.12	Hemispherical	1480
P ₂ O ₅ wt%, d	0.55	Flow	1520
SO ₃ wt%, d	0.13		
*SrO wt%, d	0.04	*Parameters not included in ACIRS' NATA scope of accreditation.	
*BaO wt%, d	0.05		
*ZnO wt%, d	0.01		

ACIRS-A2-2024 (75 g) Price: \$250.00
 ACIRS-H10-2024-Lot#1 (4 x 1 kg) Price: \$990.00
 ACIRS-EC-2011 (1 kg) Price: \$150.00

Price in AUD excluding GST and delivery costs

ACIRS HARDGROVE GRINDABILITY REFERENCE MATERIAL

ACIRS-H10-2024-Lot#1

Set of 4 x 1 kg samples

ACIRS-H10-2024-Lot#1	
	Hardgrove Grindability Index
Sample A	30
Sample B	48
Sample C	65
Sample D	84

Other ACIRS products

ACIRS ELECTRODE CARBON

ACIRS-EC-2011

ACIRS-EC-2011 is a 1 kg jar of inert electrode carbon material intended for use in the Gray-King Coke Type test as described in AS 1038.12.2 and ISO 502

ACIRS-EC-2011			
		Size Distribution	Mass, %
Moisture, %	0.2		
Ash, % d	2.8	+212 µm	0.2
Volatile Matter, % d	0.8	-212 +125 µm	12.2
Relative Density, d	2.08	-125 +63 µm	25.4
		-63 µm	62.2

ACIRS-G10-2022, ACIRS-S2C-2023, ACIRS-H10-2024-Lot#1 and ACIRS-A2-2024 have been certified under ACIRS' recently acquired ISO 17034 NATA scope of accreditation.