



**Actydon I Iridium**

**Actydon I Ruthenium**

Anode Catalyst Portfolio for Green Hydrogen Production

## Heraeus catalysts save 50-90% on iridium compared to the market's benchmark!

Heraeus' product portfolio includes electrolyzer catalysts with different precious metal loadings, which provide numerous benefits to your application. In order to find the perfect solution for your needs, you can conduct tests in Heraeus' fully equipped on-site laboratories and test center.

Heraeus' electrolyzer catalysts address decreased iridium content while increasing efficiency and performance. Our electrolyzer catalysts deliver the following benefits:



### ACTIVITY

Efficient use of Iridium in different catalyst concepts allows to increase performance & reduce costs



### STABILITY

With stability comes reliability, our catalysts will contribute to a high lifetime in your application



### IRIDIUM SAVING

Ideal for large scale application due to significant savings in precious metal content



### ELECTRODE AREA SAVING

Strong decrease in capital expenditure due to Iridium and catalyst material savings

## Actydon I Iridium

Catalyst	Actydon I Ir 100 B	Actydon I Ir 80 X	Actydon I Ir S	Actydon I Ru Ir
Features	High metal purity	High surface area material	Reduced Ir content, supported material	Reduced Ir content
Performance focus	Highly active, stable	Highly active, highly stable	Excellent activity and material efficiency	Excellent activity and material efficiency
Ir crystallite size [nm] via XRD	3	2 – 4	2.5 – 3.5, partly amorphous	1.8 – 5.5
BET surface area [m <sup>2</sup> /g]	21 – 25	>180	20 – 150	120 – 200
Mass activity @ 1.45 V <sub>cell</sub> (IR-free) [A/g]	~79	~86	~570 (30%)	~450 (Actydon I Ru 50 Ir)

For more detailed information about our broad product portfolio, please contact our sales experts.

### Heraeus Precious Metals GmbH & Co. KG

Heraeusstraße 12–14  
63450 Hanau, Germany  
hydrogen.systems@heraeus.com



[herae.us/hydrogen-systems](https://herae.us/hydrogen-systems)