Heraeus

Precious Metals

Actydon | Iridium

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

A comprehensive product portfolio to fit your needs

Catalyst	Description	Features	Ir content [%]	Ir crystallite size [nm] via XRD	BET surface area [m²/g]	Mass activity @ 1.45 V_{cell} (IR-free) [A/g_{Ir}]
Actydon I Ir 100 B	Bulk Iridium Metal	High metal purity	100	3	> 20	55
Actydon I Ir 80 X	Bulk Iridium Oxide	High surface area	79 – 83	2 – 4	> 200	86
Actydon I Ir 80 XSP	Bulk Iridium Oxide	Smaller agglomerate size for better processability	79 – 83	2 – 4	> 160	86
Actydon I Ir S	Iridium on Carrier Material	High mass activity	10 – 50	n.a.	20 – 100	138 – 460
Actydon I Ir Ru	Bulk Iridium Ruthenium Material	With stabilized Ru for high activity and Ir saving	14 – 80	1.8 – 5.5	150 – 190	177 – 3100

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

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