



Actydon | Platinum

Electrocatalysts for Electrolyzers and Fuel Cells

Heraeus' product portfolio includes fuel cell 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' fuel cell catalysts provide dedicated solutions for PEM fuel cells addressing the various requirements of anode and cathode:



ACTIVITY

Efficient use of platinum in different catalyst concepts helps to gain highest performance.



STABILITY

Achieve long lifetime for your application by using catalyst designed for best stability and reliability.



CELL REVERSAL TOLERANCE

This feature protects the anode by allowing significantly lower damage throughout time.

A comprehensive product portfolio to fit your needs

Catalyst	Actydon Pt C100 + Actydon Ir 80 X	Actydon Pt C240	Actydon Pt C700	Actydon Pt M700	Actydon Pt 50 K700
Description	20 to 40 wt.% Pt on graphitized carbon material – optional with OER additive for even higher CRT	20 to 50 wt.% Pt on medium surface area carbon	20 to 60 wt.% Pt on high surface area carbon	40 to 50 wt.% stabilized Pt on high surface area carbon	50 wt.% PtCo on high surface area carbon
Highlight	High cell reversal tolerance > 8000 s (15 $\mu\text{g}_{\text{Ir}}/\text{cm}^2$) (~75 s w/o OER additive)**	Highly accessible Pt particles	Optimized Pt surface utilization → High ECSA	Improved Pt dissolution stability	Higher Pt-dissolution stability compared to established PtCo/C catalyst
ECSA [$\text{m}^2/\text{g}_{\text{Pt}}$]	> 40	> 60	> 70	> 60	> 45
Cell voltage @ 0.1 A/cm ² (CCM)* [V]	~ 0.80	~ 0.84	~ 0.84	~ 0.84	~ 84***

*Automotive conditions

**Cell reversal tolerance time until -1.25 V_{cell}

***At 0,2mg_{Pt}/cm²

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

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