

**UPGRADE  
YOUR  
BATTERY**

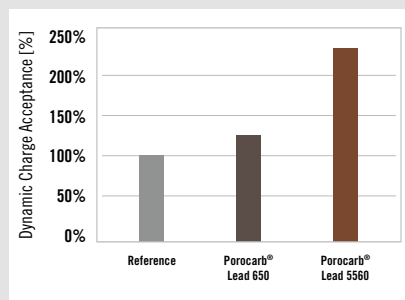
**Porocarb® Lead**  
Additive for Advanced Lead-Acid Batteries

# Porocarb® Lead – Material Properties

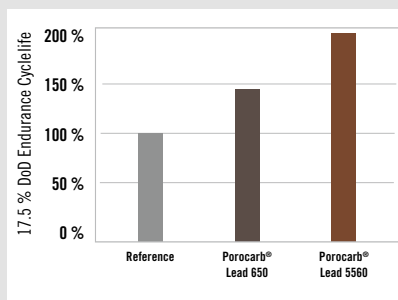
Heraeus Porocarb® defines a new generation of advanced electrode additives for lead-acid batteries. With its designed and well-defined internal porosity, Heraeus Porocarb® Lead is the first conductive additive that not only ensures electronic connectivity and nucleation within the electrode, but also enhances ionic conductivity and confinement of discharge products.

By delivering superior dynamic charge acceptance (DCA) and increased cycle life, Heraeus Porocarb® overcomes traditional lead-acid batteries charging limitations thus enabling the battery to satisfy the requirements of new applications (regenerative braking, start-stop operations, deep discharge).

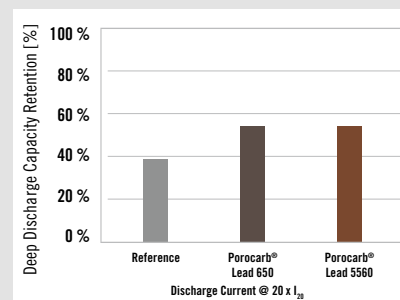
## Porocarb® takes lead-acid batteries to the next level



Heraeus Porocarb® Lead increases **charge acceptance by up to 123%** and enables quick recharging in advanced lead-acid batteries.



Heraeus Porocarb® Lead enhances **endurance cycle life by up to 100%** for a longer lifetime of electrical power systems.



Batteries with Heraeus Porocarb® Lead show up to **+48%** more **capacity at deep-discharge operations** for longer power supply in industrial and automotive applications.

Typical Material Properties	Surface Area (BET) [m <sup>2</sup> /g]	Tapped Bulk Density [g/cm <sup>3</sup> ]	D <sub>50</sub> Particle Size [μm]	D <sub>50</sub> Particle Size [μm]
Method	ISO 9277:10	ASTM D6393 (2008)	CILAS 1064	Mastersizer 3000
Porocarb® Lead 650	44–60	0.40	55–65	65–85
Porocarb® Lead 5560	450–550	0.16	50–60	125–145
Porocarb® Lead 5550	450–550	0.18	40–50	85–105



**Porocarb®**  
Lead

Heraeus Battery Technology GmbH

Heraeusstr. 12 – 14

63450 Hanau, Germany

porocarb@heraeus.com

www.heraeus-porocarb.com

[www.heraeus-porocarb.com](http://www.heraeus-porocarb.com)