CO2 Solid Sorbents

We have successfully developed CO₂ solid sorbents by applying existing technology.

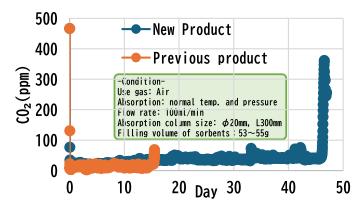
- > Available for DAC (Direct Air Capture)
- Capable of separating and capturing high-purity CO₂ via selective chemical absorption
- > Non-Volatility, Unaffected by humidity, Reusable with 100°C heat treatment

~Appearance • Property~



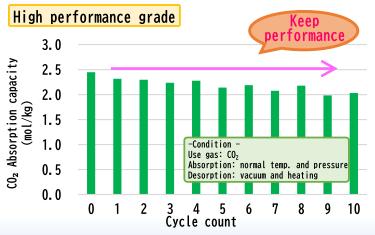
Substrate	Spherical silica gel
Absorption temp.	-20°C∼r.t.
Desorption temp.	70∼120°C
Absorption volume	1.3~2.3 mol/kg
Mechanism for CO ₂ absorption	Chemical absorption

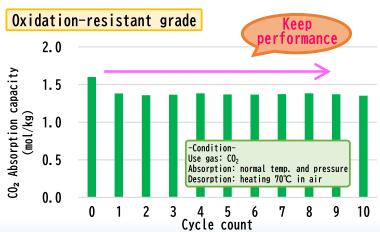
~Performance~



- Rapid absorption of ambient CO2 at levels around 400 ppm
- □ Unaffected by humidity
- More than double the CO2 absorption (compared to our previous products)

~Cycle performance~





◆► NIPPON CHEMICAL INDUSTRIAL

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