

Cerium oxide powder and cerium oxide dispersion**Abstract**

Cerium oxide powder which has carbonate groups and
5 comprises crystalline primary particles which contain
cerium oxide and carbonate groups on their surface and in a
layer close to the surface, wherein

- the powder has a BET surface area of from 25 to
150 m²/g,
- 10 - the primary particles have a mean diameter of from 5
to 50 nm,
- the layer close to the surface of the primary
particles has a depth of about 5 nm,
- the carbonate concentration in the layer close to the
15 surface decreases inwards from the surface on which
the carbonate concentration is highest,
- the carbon content due to the carbonate groups on the
surface is from 5 to 50% by area and that at a depth
of about 5 nm in the layer close to the surface is
20 from 0 to 30% by area,
- the content of cerium oxide, calculated as CeO₂ and
based on the powder, is at least 99.5% by weight and
- the content of carbon, encompassing organic and
inorganic carbon, is from 0.01 to 0.3% by weight,
25 based on the powder.

Dispersion containing this powder.

(No Suitable Figure.)