

Ref: **108-024**

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Investigation of oxidation on Pr-Fe-Co-B nanopowders produced by HDDR and mechanical milling

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The aim work is focused on investigations of the oxidation products of HDDR powders followed by mechanical milling. Different compositions based on Pr-Fe-Co-B alloy following specific oxidation conditions by 200°C for 96h were analyzed. The subject of the present work is study the influence of the particle size on the oxidation process and its stability.

The magnetic properties were measured using a vibrating sample magnetometer, the phases were identified by X ray diffraction and the mean particle size of the powders was obtained using transmission electron microscope.