

IDENTIFYING MINERALS USING PDF® PRODUCTS

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Most mineral samples often contain multiple phases that are commonly characterized using different analytical techniques such as XRF, SEM and XRD. With a combination of techniques, and a quality reference tool, one can readily distinguish between the major and minor phases, and gain a complete picture of the mineralogical makeup in a specified sample.

Every year the International Centre for Diffraction Data (ICDD) increases the number of mineral entries in the PDF® by adding new minerals approved by the International Mineralogical Association (IMA). ICDD currently has 46,101 Mineral Related and 20,626 natural mineral entries in the 2019 PDF® products. Overall, 98% of published natural minerals are covered by the database. As the IMA approves new minerals and they become published, ICDD abstracts the data as a new entry to go through the three tiered editorial review process. These entries are ultimately published in each new set. There are 146 new experimental minerals to be published in the 2020 products.