

Additional data needs for ITER

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The following elements should have data in FENDL-3:

Argon:

A significant component of air.

Example: Radiation transport out to the site boundary is important for safety.

Scandium:

Was in FENDL 1

Example: used in Diagnostics

Zinc, Silver

Germanium, Bromine, Yttrium, Cesium, Iodine, Lanthanum, Lutetium

Used in scintillators

Diagnostics

Rhodium, Rhenium

Used in mirrors

Cadmium

Neutron absorber

Antimony

Used in magnets

Barium

Used in Alite model

Uranium (235, 238) Thorium, Neptunium

For neutron diagnostics

These isotopes are missing: ^{17}O , ^{204}Pb and ^{180}W

In addition FENDL-3 should contain:

- Cross-sections for cryogenic temperatures,
- Data for thermal neutrons in hydrogen,
- Prompt gamma cross-sections for He, tritium and Ga
- DPA cross-section data for all isotopes

It was noted that there are co-incident energy points in K, Ca and Mo in the existing FENDL-2.1 file.