



For major oxides a comprehensive digestion by metaborate/tetraborate is performed analyzed by ICP, while trace elements are analyzed via ICPMS. Suitable for research studies.

**lithium metaborate/tetraborate fusion ICP whole rock)**

| Major Oxide                    | Detection limit % |
|--------------------------------|-------------------|
| SiO <sub>2</sub>               | 0.01              |
| Al <sub>2</sub> O <sub>3</sub> | 0.01              |
| Fe <sub>2</sub> O <sub>3</sub> | 0.01              |
| MgO                            | 0.01              |
| MnO                            | 0.001             |
| CaO                            | 0.01              |
| TiO <sub>2</sub>               | 0.001             |
| Na <sub>2</sub> O              | 0.01              |
| K <sub>2</sub> O               | 0.01              |
| P <sub>2</sub> O <sub>5</sub>  | 0.01              |
| LOI                            | 0.01              |

**trace element ICP-MS**

| Elements | Detection Limit ppm | Upper limit ppm |
|----------|---------------------|-----------------|
| Ag       | 0.5                 | 100             |
| As       | 5                   | 2,000           |
| Ba       | 3                   | 500,000         |
| Be       | 1                   | -               |
| Bi       | 0.1                 | 2,000           |
| Ce       | 0.05                | 3,000           |
| Co       | 1                   | 1,000           |
| Cr       | 20                  | 10,000          |
| Cs       | 0.1                 | 1,000           |
| Cu       | 10                  | 10,000          |
| Dy       | 0.01                | 1,000           |
| Er       | 0.01                | 1,000           |
| Eu       | 0.005               | 1,000           |

|    |       |        |
|----|-------|--------|
| Ga | 1     | 500    |
| Gd | 0.01  | 1,000  |
| Ge | 0.5   | 500    |
| Hf | 0.1   | 1,000  |
| Ho | 0.01  | 1,000  |
| In | 0.1   | 200    |
| La | 0.05  | 2,000  |
| Lu | 0.002 | 1,000  |
| Mo | 2     | 100    |
| Nb | 0.2   | 1,000  |
| Nd | 0.05  | 2,000  |
| Ni | 20    | 10,000 |
| Pb | 5     | 10,000 |
| Pr | 0.01  | 1,000  |
| Rb | 1     | 1,000  |
| Sb | 0.2   | 200    |
| Sc | 1     | -      |
| Sm | 0.01  | 1,000  |
| Sn | 1     | 1,000  |
| Sr | 2     | 10,000 |
| Ta | 0.01  | 500    |
| Tb | 0.01  | 1,000  |
| Th | 0.05  | 2,000  |
| Tl | 0.05  | 1,000  |
| Tm | 0.005 | 1,000  |
| U  | 0.01  | 1,000  |
| V  | 5     | 10,000 |
| W  | 0.5   | 5,000  |
| Y  | 0.5   | 10,000 |
| Yb | 0.01  | 1,000  |
| Zn | 30    | 10,000 |
| Zr | 1     | 10,000 |