

## **Human Hair (Methyl Mercury)**

|                 |                                   |
|-----------------|-----------------------------------|
| Art. ID         | IAEA-085                          |
| Unit            | 5 g                               |
| Deliverydetails | No Dangerous Good /not restricted |

### Description

The materials were prepared from human hair which was donated to the IAEA. IAEA-085 represents hair with an elevated level of methylmercury (achieved by spiking the sample with methylmercury) whilst IAEA-086 is representative of the endogenous level for this analyte. The hair was cryogenically homogenized using the stainless steel "CryoPalla" mill at the KFA-Jülich Specimen Bank facility. The hair was subjected to consecutive millings, until approximately 70% had a particle size below 71 µm. These materials were gamma-sterilized to ensure long-term stability of the material by inhibiting microbial action.

| Text/Information   | Analyte/Parameter     | CAS number  | Concentration/Value | Unit  | Method | Source |
|--------------------|-----------------------|-------------|---------------------|-------|--------|--------|
| Information value  | Calcium (Ca)          | [7440-70-2] | 929                 | mg/kg |        |        |
| Information value  | Copper (Cu)           | [7440-50-8] | 16,8                | mg/kg |        |        |
| Recommended value  | Iron (Fe)             | [7439-89-6] | 79,3                | mg/kg |        |        |
| Recommended value  | Mercury (Hg)          | [7439-97-6] | 23,2                | mg/kg |        |        |
| As inorganic Hg, R | Methylmercury (as Hg) |             | 22,9                | mg/kg |        |        |
| Information value  | Magnesium (Mg)        | [7439-95-4] | 140                 | mg/kg |        |        |
| Information value  | Manganese (Mn)        | [7439-96-5] | 8,8                 | mg/kg |        |        |
| Information value  | Scandium (Sc)         | [7440-20-2] | 0,0092              | mg/kg |        |        |
| Information value  | Selenium (Se)         | [7782-49-2] | 1,07                | mg/kg |        |        |
| Recommended value  | Zinc (Zn)             | [7440-66-6] | 163                 | mg/kg |        |        |