

## *GC-MS quantitative determination of phthalates on cosmetic products*

**Test aim:** the method allows the determination of different phthalates on cosmetic products and different complex matrices through gas chromatography with mass detector (GC-MS).

**Procedure:** the extraction procedure varies according to the different kinds of matrix. The solution obtained is injected into a gas chromatography equipped with a mass detector (GC-MS). The white test is performed injecting the used extracting material into the instrument. The peak detection takes place comparing the sample chromatogram with the standard sample solution at a given concentration. Since phthalates are widely spread as environmental pollutants, the method provides a procedure and instrumental equipment capable of avoiding any external contamination and the subsequent detection of false positives.

**Detection limit:** 10 mg/kg; in some cases up to 0.10 mg/kg

**Instruments:** gas chromatography with mass detector (GC-MS)

**Method:** internal