Third Commission Directive of 27 September 1983 on the approximation of the laws of the Member States relating to methods of analysis necessary for checking the composition of cosmetic products (83/514/EEC)

ANNEX

DETERMINATION OF DICHLOROMETHANE AND 1,1,1-TRICHLOROETHANE
IDENTIFICATION AND DETERMINATION OF NITROMETHANE

6.   CALCULATIONS

6.1.   ***Response factor of nitromethane, calculated with reference to the internal standard used***

If 'n' represents nitromethane:

let:

k_n	=	its response factor,
m'_n	=	its mass (in grams) in the mixture,
S'_n	=	its peak area.

If 'c' represents the internal standard, chloroform or 2,4-dimathylheptane:

let:

m'_c	=	its mass (in grams) in the mixture,
S'_c	=	its peak area,

then:

$$K_n = \frac{m'_n}{m'_c} \times \frac{S'_c}{S'_n}$$

(k_n is a function o^2 the apparatus).

6.2.   ***Concentration of nkromethane in the sample***

If 'n' represents nitromethane:

let:

k_n	=	its response factor,
S_n	=	its peak area.

If 'c' represents the internal standard, chloroform or 2,4-dimethylheptane:

let:

m_c	=	its mass (in grans) in the mixture,
S_c	=	its peak area,
M	=	the mass (in grams) of the aerosol transferred,

then the % (m/m) nitromethane in the sample is:

$$\frac{m_c}{M} \times \frac{K_n \times S_n}{S_c} \times 100$$