



Detergenza ecologica - Environmentally friendly detergency - Ökologische Reinigungsmittel - Détérgence Écologique

CHARTER of RAW MATERIALS SELECTION

As stated in the Charter of Values, Bensos di Silvia Palladini & C. s.a.s. aim is to supply detergents and cosmetics with low environmental and toxicological impact, according to its strict behaviour principles and criteria.

What we usually do is studying both ecological features (in particular data relative to biodegradability and toxicity towards aquatic organisms) and toxicological features (in particular data relative to mutagenicity, reproductive toxicity, endocrine disruption and allergenicity) of each raw material, especially new ones but old ones too, by keeping updated our databases.

Selection of substances undergoes to our criteria, amongst which the main ones are: OECD Tests 301 for all organic substances; EC50 > 1 mg/L for all ingredients (apart Linea Forte products, containing one ingredient with EC50 < 1 mg/L per each, for ex. the disinfecting agent); > 1000 mg/Kg mutagenicity values (in particular *in vitro* human lymphocytes data) apart lactic acid (900 mg/Kg) which is produced in human body too and in respect of whom human body develops self-protection mechanisms; > 1000 mg/Kg reproductive toxicity and teratogenicity; no inclusion into the SIN List nor suspects of interaction with the endocrine system (included case studies); no allergenic properties. We also take into consideration the mobility and bioaccumulation tendencies, excluding both chemicals with LogKow > 4 (recently revised, before we applied Log > 3) for two reasons: chemicals showing LogKow = 4-7 move too much in the blood flow, and chemicals with LogKow > 7 are bioaccumulative. We make some substantiated exceptions: some olive oil derived raw materials, including the same olive oil, as all other parameters are safe (until proven otherwise); some pure greases for cosmetics; fragrances (used in small amounts as possible).

As regards origin of raw materials, we take it into account and we select raw materials favoring the renewable origin ones, provided that they complies with the other criteria above-mentioned. Our struggle to select substances is aimed to exclude long-term toxic chemicals, even if natural based.

Having established this, Bensos undertakes to select as far as possible renewable origin ingredients to develop new products, as always did since its founding. Moreover, we are aimed to increase the proportion of renewable raw materials over time, in order to make our production more and more sustainable.

Villanuova s/C, 20/09/2018
Sincerely

Dr. Silvia Palladini