# Position Paper

## On Draft ecological Criteria for Laundry & Dishwashers Detergents for professional Use

**= 30 March 2011 =**

Regulation (EC) No 66/2010 defines the new EU Ecolabel scheme and the framework for the definition and adoption of the criteria for different product families.

As indicated in Article 6 of the Regulation, the new criteria should be:
1°) scientifically-based
2°) based on a sustainable approach
3°) based on a life cycle approach and
4°) achievable by a significant proportion of existing products

The proposal which limits the use of aNBO and anNBO in the proposed criteria (Criterion 3) does not respect the principle of "science based" defined in article 6 of the regulation.

This view was supported by SCHER which in its opinion (25th November 2005) states that:

***"The requirement for ready an ultimate biodegradability under anaerobic conditions is not by itself regarded as an effective measure for environmental protection".***

This view was also supported by the Commission in its report (25 May 2009) to the European Parliament and the Council, concerning anaerobic biodegradation, the European Commission supported SCHER opinion of 2008, concluded that:

***(i)*** ***"anaerobic biodegradability should not be used as an additional pass/fail criterion for the environmental acceptability of surfactants such as LAS which are readily biodegradable under aerobic conditions."***

***(ii)*** ***"The remaining concerns therefore focus on the possible environmental toxicity of surfactants, rather than on their biodegradability. At present, however, there is no evidence that would justify legislative measures at EU level, such as regulatory limit values for LAS in sludge."***

2°) Other Authorities are supporting this fact on anaerobic biodegradability, such as the Danish EPA which in the 2009 revision of List Of Undesirable Substances (LOUS), mentions in Annex D, substances that were included in previous list (2004) but now do not show similar concerns as surfactants do not biodegrade completely under anaerobic conditions:

*"They have been deleted because changes in Danish consumer habits show that they do not raise same problem for the waste stream. Also additional data showed that LAS is not as problematic as previously thought."*

3°) Field studies and generated data indicate that LAS biodegrades rapidly and completely and does not accumulate in the environment. Extensive aquatic toxicity and safety evaluation data from more than 30 years of use as a detergent surfactant confirm that LAS is safe for aquatic populations. Field studies also confirm that even after 30 years of use, LAS has not accumulated in these

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environments, providing further scientific support for aerobic metabolism through oxygen diffusion in natural anaerobic environments.

In particular, the Fraunhofer report (July 2003) concluded that the LAS concentrations are low in surface water and are similar in all countries. Moreover, no accumulation of the measured surfactants (including LAS) has been observed in water bodies.

With regard to sediments, no accumulation of aerobically ready biodegradable surfactants has been observed, in particular for LAS, even over a period of several decades.

Regarding soil fertilisation, when the anaerobically treated sludge is used as fertiliser in agriculture, the surfactant concentration in sludge-amended soil is predicted to decrease rapidly because of the aerobic biodegradation process that occurs in soil.

Overall, the data analysis confirms that all surfactants must be ultimately and readily biodegradable under aerobic condition in order to prevent major environmental impact.

According to the report, LAS is still the most cost-effective surfactant and the most flexible one for many cleaning purposes. Apart from the excellent performance LAS can be produced, stored and transported in high concentrations, leading to lower storage and transport cost compared to the main potential alternatives.

Despite the favourable conclusions of the report, ECOSOL and CESIO / ERASM has informed the Commission of their voluntary initiative to undertake further research on LAS and other detergent surfactants in the short, medium and long term. This includes:

(i) Up-dating the LAS HERA Report with a review of the most recent literature on the effects of LAS on microbial communities in soil (first updated communicated, second ongoing).
(ii) Review of anaerobic test methodology, investigating alternative methods for testing anaerobic biodegradability (2$^{nd}$ phase of ring test ongoing) and applying specific simulation tests (ongoing).
(iii) Further investigation to confirm results found by Lara-Martin et al. (2007) on the anaerobic degradation of LAS in marine sediments (ongoing).
(iv) In this framework, ERASM has created a Surfactant LCI & Ecofootprinting project team, with the proposal to jointly update the existing LCI inventories (1995), for the production of major surfactant groups and possibly their main precursors/intermediates, as well as to generate new inventories for a selection of market-relevant surfactants not presently covered. Averaged data and comprehensive interpretation of the cradle-to-gate life-cycle of each surfactant will be published in order to get a transparent communication with different stakeholders, as well as maintain a high level of environmental leadership and credibility and to illustrate the emission improvements made over time. The results of this study are scheduled to be available by end 2012.

Furthermore, Na LAS has been duly registered in 2010, according to REACH requirements. A Chemical Safety Report has been carried out with an extensive database which allowed calculating PNEC in several environmental compartments, as well as to demonstrate that LAS is neither a PBT nor a vPvB substance. As a conclusion, all environmental RCRs for all exposure scenarios and environmental compartments are well below 1, with the conclusion that risks to the environment are unlikely.

Whilst we understand the proposed approach to make it more stringent for the granting of Ecolabelling, we believe that such proposed criteria should not depart from a scientific approach which also takes into consideration the LCA elements / life cycle of the surfactants.

***Consequently, in view of SCHER opinion on anaerobic biodegradation, supported by the Commission and Danish EPA, REACH findings and new data being generated, we ask the Ad Hoc Working Group, to take these facts into consideration and allow Industry to present further research results as we are doing to the Commission.***

*(*) ECOSOL and CESIO are 2* sector groups of the European Chemical Industry Council (CEFIC)
ECOSOL represents the European producers of Linear Alkylbenzenes (LAB) and Linear Alkylbenzene Sulphonates (LAS) and CESIO is the European Committee of Organic Surfactants and their Intermediates
ERASM (Environmental Risk Assessment and Management) is a joint platform of the European detergent and surfactants producers represented by A.I.S.E (Association Internationale de la Savonnerie, de la Détergence et des Produits d'Entretien) and CESIO.