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Sodium hydroxide – REACH Consortium

Guidance for identification of the substance

Please find below some guidance to fulfil the REACH requirements for the identification of the substance.

According to Article 10 and 11 of the REACH Regulation each registrant should provide the identity of the substance. The information on the identity of the substance should be provided as specified in section 2 of Annex VI of the REACH Regulation.

Data on the identity and analytical information of sodium hydroxide have to be provided via IUCLID. A proposal for the completion of section 1.4 of IUCLID has been prepared (see separate Annex).

Please find hereafter some specific remarks and recommendations related with each section of IUCLID.

Section 1.2 Degree of purity and Constituents

If a legal entity manufactures both the liquid and the solid form then the information provided should cover both forms (liquid and solid). For the calculation of the purity the water content of the liquid should therefore be excluded from the calculation!

Section 1.2 Impurities

It is recommended that only impurities with a concentration higher than 0.1 % should be given in section 1.2 of IUCLID.

Each company should review if the impurities have an effect on the classification and labelling of the substance. For example CMR category 1 and 2 substances, present at a concentration of more than 0.1 %, will affect the classification and labelling of the substance.

Section 1.4 Analytical information

In the text field of "Analytical methods and spectral data" only a limited amount of characters (255) can be given and therefore the text should be short. For this reason it is recommended to give only a very short listing of the analytical methods which are applicable for sodium hydroxide (see Annex).

To confirm the identity of the substance we recommend to attach an analytical report for each legal entity. Each company may decide to analyse samples from different manufacturing sites of one legal entity to demonstrate that all products are covered by the dossier of the registered substance.

It is recommend to only include the results of the following methods in the analytical report:

- total alkalimetry,
- ICP and
- ICP-OES.

Total alkalimetry is used to determine the hydroxide content of the substance. With ICP the sodium content can be established, while with ICP-OES the presence of very low levels of other cationic impurities can be checked. These 3 methods are sufficient to confirm that the substance is sodium hydroxide and that it is relatively pure (mono-constituent).

For each legal entity it is recommended to use a liquid product for the analysis. In the report the analytical results should be expressed based on the liquid product (as such). However, please note that the results should also be recalculated based on dry weight because the concentrations based on dry weight should be consistent with those mentioned in IUCLID section 1.2.

If there are impurities present in the substance at a concentration higher or equal to 0.1 % then we recommend to determine also the concentration of these impurities using the methods recommended in section 1.4 of IUCLID (see separate Annex). The results of the analysis should also be attached to the IUCLID of your legal entity.