



## HYDROGEN CHLORIDE (HCl) – REACH CONSORTIUM

### Communication on uses and exposure scenarios

Based on the REACH Regulation a chemical safety assessment is needed for the substance hydrogen chloride. To enable a chemical safety assessment the uses of hydrogen chloride have to be evaluated and exposure scenarios have to be developed.

#### Uses

To describe the uses within REACH a use descriptor system has been developed. The guidance document, which describes this system, is available via internet:

[http://guidance.echa.europa.eu/docs/guidance\\_document/information\\_requirements\\_r12\\_en.pdf](http://guidance.echa.europa.eu/docs/guidance_document/information_requirements_r12_en.pdf)

Every use can be described by specifying the sector in which the chemical is used (***Sector of use: SU***), the type of product involved (***Product Category: PC***), the type of process (***Process Category: PC***) and the possible release to environment (***Environmental Release Category: ERC***).

Because hydrogen chloride has so many uses and is used so widely it can be used in many ***sectors of use (SU)*** described by the use descriptor system. The Excel table attached at the end of this document details the possible SU that have been proposed by HCl manufacturers. Additionally, some uses have been described with NACE codes.

Hydrogen chloride can be used in many different chemical ***product categories (PC)***. It can be used for example as metal surface treatment product (PC14), non-metal-surface treatment product (PC15), intermediate (PC19), pH regulator (PC20), laboratory chemical (PC21), cleaning product (PC35), water treatment chemical (PC37). The PCs are detailed for every SU in the attached Excel table.

Hydrogen chloride could be used according to the following ***process categories (PROC)***:

- PROC1 Use in closed process, no likelihood of exposure
- PROC2 Use in closed, continuous process with occasional controlled exposure
- PROC3 Use in closed batch process (synthesis or formulation)
- PROC4 Use in batch and other process (synthesis) where opportunity for exposure arises
- PROC5 Mixing or blending in batch processes (multistage and/or significant contact)
- PROC8 Transfer of chemicals from/to vessels/large containers at non dedicated facilities (?)
- PROC9 Transfer of chemicals into small containers (dedicated filling line)

- PROC10 Roller application or brushing
- PROC11 Non industrial spraying
- PROC13 Treatment of articles by dipping and pouring
- PROC15 Use of laboratory reagents in small scale laboratories
- PROC19 Hand-mixing with intimate contact (only PPE available)

The PROCs are detailed for every SU in the Excel table.

To assess the environmental exposure deriving from the use of substances *environmental release categories (ERC)* have been developed for REACH. For hydrogen chloride environmental release categories have been defined.

Although hydrogen chloride can be used during the manufacturing process of articles, the substance is not expected to be present in the article. The *article categories (AC)* do not seem applicable for hydrogen chloride.

#### Communication between registrants (suppliers) and downstream users

Downstream users of hydrogen chloride are encouraged to verify if their product category, process category and environmental release category of their uses are included in this document. **If not, please inform your supplier.** The full list of use descriptors proposed by consortium members can be found on this web page:

<http://www.eurochlor.org/index.asp?page=779>

The same page contains an excel file summarizing the use descriptors for each Exposure Scenario. It specifies also the operating conditions and risk management measures for each use. This file can be used for communication with downstream users (for example, to check the operating conditions).

Please notice that the list of uses will be updated when necessary. The most recent version is always available on the following web page: <http://www.eurochlor.org/index.asp?page=779>