

15.07.2014

Note for the attention of Tim Bowmer, Chairman of the Committee for Risk Assessment

Ref: Request to the Committee for Risk Assessment for an opinion on the risk assessment contained in the RIVM report "Risk assessment of an increased concentration limit of benzene in natural gas"

Based on the request from the European Commission to ECHA of 28 May 2014, the purpose of this note is to give a mandate to RAC to draw up an opinion on the information contained in the RIVM report "Risk assessment of an increased concentration limit of benzene in natural gas" and in particular the risk assessment performed on consumers exposed to benzene contained in natural gas.

1. Background

Benzene is a hazardous substance which has a harmonised classification as germ cell mutagen (Muta. 1B) and as carcinogen (Carc. 1A) in Annex VI to the CLP Regulation. It also has a range of acute effects on human health. Current exposure limits in the EU legislative framework, in particular the binding occupational exposure limit in worker protection legislation and the exposure air quality limit defined in Directive 2000/69/EC relating to limit values for benzene and carbon monoxide in ambient air, are based on the carcinogenic and mutagenic potential of benzene.

The REACH Regulation, namely in entry 5 of Annex XVII, prohibits the marketing and use of benzene where it is contained in other substances or in mixtures at or above a concentration of 0.1% by weight (w/w).

Pursuant to a report prepared by the Dutch National Institute for Public Health and the Environment (RIVM), the concentration limit of benzene in natural gas produced in their Member State (NL) as supplied to consumers may occasionally exceed 0.1% w/w, but does not exceed 0.1% v/v. This situation may also occur in other Member States, for instance, as a consequence of exports of natural gas.

To evaluate the consequences of a volume-based concentration limit of 0.1% (v/v) for human health, the RIVM report contains a risk assessment for consumers exposed to benzene contained in natural gas at 0.1% (w/w) and 0.1% (v/v) through cooking, heating, small gas leaks and refuelling cars. The report concludes that for all exposure scenarios, a volume-based concentration limit of 0.1% would not lead to a risk for consumers that is not adequately controlled.

The Commission is considering to introduce a derogation for natural gas in entry 5 of Annex XVII to REACH, namely to allow for 0.1% benzene content by volume. For benzene, a change from weight percentage to volume percentage would result in 4.2-fold higher allowable benzene concentrations by weight (w/w).

2. Terms of Reference

Pursuant to Art. 77(3)(c) of the REACH Regulation, the Committee for Risk Assessment shall draw up an opinion on any aspect concerning the safety of substances on their own, in mixtures or in articles which is not covered by other processes set out in REACH or the CLP Regulation.

In order to allow the Commission, on the basis of relevant scientific advice by RAC, to take action on a possible derogation for natural gas in entry 5 of Annex XVII to REACH, the Executive Director of ECHA requests RAC to develop an opinion as follows:

- a) Evaluate the exposure information contained in the RIVM report and in particular the risk assessment performed on consumers exposed to benzene contained in natural gas. The analysis should only focus on the exposure scenario analysed in the report for cooking and heating, not on accidental leakage of the natural gas;
- b) Express whether RAC can confirm the conclusions of the RIVM report that consumer exposure to benzene present in natural gas at a concentration greater than 0.1% (w/w) but below 0.1% (v/v) during regular use of natural gas as fuel for cooking and heating does not represent a risk for consumers that is not adequately controlled.

3. Timescale for the RAC opinion

The opinion of the RAC should preferably be adopted by the time of its 31st plenary meeting in the first days of December 2014. I wish to be informed if the adoption of the opinion is not feasible by the indicated target date.

4. Remuneration

The task for RAC following from this request is not considered to fulfil any of the requirements of a transfer of funds to the competent authorities of the Member States pursuant to Article 14(1) of Regulation (EC) 340/2008 and therefore no remuneration will be paid by the Agency.



Geert Dancet
Executive Director

Cc: Jukka Malm, Jack de Bruijn