

201-14456



NCIC HPV
Sent by: Mary-Beth
Weaver

05/12/2003 10:53 AM

To: NCIC HPV, moran.matthew@epa.gov
cc:

Subject: Olefin Hydroformylation By-Products HPV Test Plan

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05/12/03



nigel.j.sarginson@exxonmobil.com on 05/09/2003 07:57:39 PM

To: oppt.ncic@epamail.epa.gov, Rtk Chem/DC/USEPA/US@EPA
cc:

Subject: Olefin Hydroformylation By-Products HPV Test Plan

Further to questions raised by the EPA on the above test plan please find below our response:

Letter

(See attached file: NJS Letter to EPA sent electronically 2003.doc)

Attachment I - TSCA Definitions

(See attached file: Attachment IHOF.doc)

Attachment II - IUCLID Files for 2-ethylhexanol, 1-hexanol, and 1 dodecanol

(See attached file: 2ethylhexanol.doc.rtf) (See attached file: hexanol1.doc.rtf) (See attached file: dodecanol1.doc.rtf)

Attachment III Revised Olefin Hydroformylation Products Test Plan and Robust Summaries

(See attached file: HPV-Olefin Hydroformylation Products Test Plan 9-23-02.doc) (See attached file: HOFs & LOFs - Environ Robust Summaries 10-16-02.doc) (See attached file: HOFs&LOFs - Mammalian Summaries.doc)

Regards

Nigel Sarginson

Global Product Stewardship & Regulatory Affairs Manager - Intermediates -
ExxonMobil Chemical Company - 13501 Katy Freeway - Houston - Texas -
77079-1398 - Tel 281-870-6783 - Fax 281-588-4664

-  NJS Letter to EPA sent electronically 2003.doc
-  Attachment IHOF.doc
-  2ethyl hexanol .doc.rtf
-  hexan1ol.doc.rtf
-  dodecanol.doc.rtf
-  HPV-Olefin Hydroformylation Products Test Plan 9-23-02.doc
-  HOFs & LOFs - Environ Robust Summaries 10-16-02.doc
-  HOFs&LOFs - Mammalian Summaries.doc

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Nigel J. Sarginson
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Product Stewardship & Regulatory
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ExxonMobil
Chemical

February 10, 2003

Mr. Oscar Hernandez
Administrator
US Environmental Protection Agency
P.O. Box 1473
Merrifield, VA 22116
Attention: Chemical Right-to-Know Program

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Dear Mr. Hernandez:

Olefin Hydroformylation By-products HPV Test Plan

Thank you for your letter of August 8, 2002, regarding our HPV submission for the Olefin Hydroformylation By-Products category. We hope that this letter and the attachments provided will help answer the questions that the Agency has on this submission.

Questions 1-3 are primarily related to the composition of the members of this category. All of the substances in this category are UCVB materials under TSCA. The substances in this category are by-products of our alcohol manufacturing process, and are primarily reused within our facility. Although they do not meet the definition of site-limited intermediates as defined in the HPV program, most of the quantities produced are used only in our facility, and are handled in enclosed systems with limited potential for human contact and exposure. These by-products are actually recycled within the alcohol production facilities, supporting the overall environmental and economic sustainability of this process.

Attachment I to this letter is a summary of the TSCA definitions of these materials, indicating the broad variability of the composition. The composition of these by-products is consistent with these UCVB definitions.

Question 4 relates to robust summaries for materials proposed for read-across to the materials in this category. ExxonMobil did not conduct the studies for these and therefore robust summaries could not be prepared by us and

submitted with the category assessment. These results are already publicly available and were also submitted with our Alkyl Alcohol test plan. However, many of these studies are publicly available in the peer-reviewed literature or are on file with EPA. Therefore, rather than proposing additional studies for these endpoints, which is clearly not necessary, we submit copies of the IUCLID files with this reply (Attachment II) to bring to your attention that such data already exists in the public domain. Table 4 of the revised category assessment lists the endpoints and materials for which IUCLID files provide additional data. The IUCLID files are:

- 2-ethyl-1-hexanol: read-across for CAS Nos. 68526-80-7, 68527-04-8, 68526-96-5, 68526-88-5
- 1-hexanol: read-across for CAS nos. 68527-03-7, 68938-02-3
- 1-dodecanol: read-across for CAS nos. 68527-06-0, 68526-92-1, 68526-91-0

We also include in this reply robust summaries for the ECOSAR estimations referenced in the test plan. In addition, we have included robust summaries for the log Kow values for which we have measured data and the EPIWIN estimated data. These summaries have been added to the Environmental Robust summary package.

Question 5 relates to the organization of the submission package. Due to the complex and variable nature of the hydroformylation by-products, their toxicity is best evaluated by presenting data from representative materials of the major constituents. Table 4 of the category evaluation includes in generic terms, the carbon range of the alcohol (or olefin) predominantly found in each material as well as data from representative materials. The first column of Table 4 lists the carbon range typically expected for each product and its constituents. In contrast, the data listed for each endpoint reflects robust summaries for specific products such as “alcohols, CI 1-14 iso, CI 3 rich,” which are representative of a C13-14 alcohol. In this submission, we have improved the formatting of the table to make it easier to follow.

In addition, we have provided cross-references for the robust summaries in the biodegradation table.

Question 6 indicates that the data for log P are omitted. We have developed these data, and they are now included in Table 2 of the assessment.

The revised Category Assessment document is provided as Attachment III (together with the Mammalian and Environmental Robust Summaries). I hope that this additional information will assist the Agency in reviewing our submission. If you have technical questions on this material, please contact Dr. Laura Keller (281-870-6501 or laura.h.keller@exxonmobil.com).

Yours sincerely,

N.J. Sarginson

Intermediates Global Product Stewardship and Regulatory Affairs Manager

Attachment I ▪ TSCA definitions

Attachment II - IUCLID files for 2-ethylhexanol, 1-hexanol, and 1-dodecanol

Attachment III ▪ Revised Category Assessment Document and Robust Summaries