

## Details on Cost calculation for Vinyl Acetate REACH Dossier

This document aims at providing detailed information on the cost for the vinyl acetate Letter of Access in order to fulfil the obligation to ensure that the costs of sharing the information are determined in a fair, transparent and non-discriminatory way.

When joining the REACH Joint Registration for vinyl acetate, co-registrants will receive all data elements required to submit their registration dossiers:

- template of the Chemical Safety Report (Parts A & B) that covers the identified common uses
- a IUCLID5 file including the following sections (robust study summaries where appropriate)
  - 4 Physical and Chemical Properties
  - 5 Environmental Fate and Pathways
  - 6 Ecotoxicological Information
  - 7 Toxicological Information
  - 11 Guidance on Safe Use (proposal from the lead registrant)
  - 12 Literature Search
  - 13 Assessment Reports

In order to generate this comprehensive documentation, Celanese Chemicals Europe GmbH as the Lead Registrant has worked together with member companies of the vinyl acetate consortium, as well as consultants. Since formation of the consortium in 2008, consortium members as well as consultants have spent time for the preparation of the vinyl acetate REACH registration dossier, including the major steps of

- data gap analysis
- data quality evaluation and determination of key studies
- preparation of the IUCLID file
- determination of common uses and development of the Chemical Safety Report

All these activities contribute to the cost of the Letter of Access.

Vinyl acetate is a very data rich substance. The registration dossier covers all data required in REACH Annexes VII-X; no test proposal for further testing was submitted as part of the dossier.

The current cost for a Letter of Access is based on the confirmation of 23 registrants in the tonnage band above 1.000 tonnes/year.

These above stated aspects needs to be taken into consideration when comparing the cost of the vinyl acetate Letter of Access to the amounts requested for other substances.

The approach agreed within the REACH consortium for calculating the cost for the Letter of Access for vinyl acetate registration is that all cost are distributing among the known 2010 registrants in order to bring the balance to zero.

All 2010 registrants are expected to require a registration for the highest tonnage band > 1.000 to/a. The 2010 registrants will be reimbursed when new registrants in lower tonnage bands join the Joint Registration at a later stage. Thus, as required by the REACH regulation, registrants will only be required to share in the costs of information that they are required to submit to satisfy their registration requirements.

The cost for the vinyl acetate REACH registration dossier consists of three main elements

Dossier Preparation Cost including Consortium member company expenditures, consultant activities and Consortium administrative Cost	€ 245.925
Cost for Data from data holders	€ 1.324.187
<b>Overall Cost REACH Dossier VAM</b>	<b>€ 1.570.112</b>
Number of 2010 Registrants	23
Cost Letter of Access	<b>€ 68.266</b>

### Details on Data cost

Vinyl acetate is a very data rich substance. The registration dossier covers all data required in REACH Annexes VII-X; no test proposal for further testing was submitted as part of the dossier.

No reimbursement is sought for ecotoxicological and physico-chemical data, the data cost is solely related to toxicological data.

*104-week Inhalation Combined Chronic Toxicity and Carcinogenicity study in both the Rat and Mouse with vinyl acetate (aka - Owen; Hazleton Labs 1988):*

In this case, neither the rat, nor the mouse inhalation studies, by themselves, would adequately inform both quantitative risk assessment and hazard classification for this key endpoint. While ultimately the rat study becomes the basis for quantitative assessments, the presence of positive findings in the rat study would automatically trigger the need to carry out a study in another species, in order to better understand the mechanisms of action and potential relevance to humans, hence the mouse study becomes an essential part of the dossier. (REACH cost 1,053,482 €)

*Oral and Inhalation Teratology studies in the Rat with vinyl acetate (aka - Irving; Hazleton Labs 1980):*

Key studies to meet the endpoint. Significant discount is agreed regarding the multiple exposure scenarios, and the data holder agreed to include data compensation only for the inhalation study, however with cost increased by 50% over oral cost. (REACH cost 56,790 €)

*High Content Cytotoxicity and Micronucleus in Human TK6 Cells exposed to vinyl acetate and acetaldehyde (aka - Recio; ILS 2010):*

This key study is new and direct costs available. Data holder agrees to 50% of direct costs for the "VAM-only" portion of this study, plus agreed analytical and administrative up charges. (REACH cost 17,130 €)

*Two-generation Reproduction study in Rats receiving Drinking Water containing vinyl acetate (Mebus, 1995 aka - Shaw; Hazleton Labs):*

Key study. If a Data Holder identifies themselves in the SIEF as such, then they are entitled to fair compensation for their study if it is used in the dossier as a key study, regardless of whether it is published or not. (REACH cost 196,785 €)

*104-week oral (Drinking Water) Combined Chronic Toxicity and Carcinogenicity study in the Rat and Mouse with vinyl acetate (aka - Shaw; Hazleton Labs 1988)*

While used as a key studies in the VAM dossier, the data holder affirms the precedence of the inhalation studies for both quantitative risk assessment and hazard classification. As such, the data holder exercises its right to seek no compensation for these carcinogenicity studies in two species. (REACH cost 0 €)

*Subchronic Toxicity 90-Day Drinking Water in Rats and Mice with vinyl acetate (aka - Shaw; Hazleton Labs 1988)*

While used as a key studies in the VAM dossier, the data holder affirms the precedence of the inhalation studies for both quantitative risk assessment and hazard classification. As such, the data holder exercises its right to seek no compensation for these 90-day studies in two species. (REACH cost 0 €)

<b>Toxicological Studies</b>	<b>Fleischer List Cost of study</b>	<b>Study Cost based on Fleischer List value as available and adjustments in "Comments"</b>	<b>Revised cost<sup>1</sup></b>	<b>50% Deduction for Cost for REACH use only</b>	<b>Comments</b>
Hazleton / Owen. (1988) 104-week inhalation combined chronic toxicity and carcinogenicity study in the rat and mouse	not available for inhalation	1.755.803 €	2.106.964 €	1.053.482 €	Fleischer cost for inhalation not available; cost for both inhalation chronic toxicity and carcinogenicity in rats and mice: data compensation for inhalation added as 50% increase over value for oral carcinogenicity study (i.e. 780.357 €) 50% reduction for the second species
Hazleton / Irving. (1980) Vinyl acetate oral and inhalation teratology studies in the rat	63100 € (oral study)	94.650 €	113.580 €	56.790 €	Fleischer cost for inhalation not available; data compensation for inhalation added as 50% increase over oral cost
Hazleton /Mebus et al. (1995) A two-generation reproduction study in rats receiving drinking water containing vinyl acetate. Fundamental & Applied Toxicology 24, 206-216.	327.975 €	327.975 €	393.570 €	196.785 €	Oral 2-generation Fleischer cost without adjustments
ILS / Recio. (2010) High content cytotoxicity and micronucleus in Human TK6 Cells Exposed to Vinyl Acetate and Acetaldehyde. Vinyl Acetate Council.	28.550 €	28.550 €	34.260 €	17.130 €	cost includes analytical but excludes acetaldehyde testing
				<b>1.324.187 €</b>	

<sup>1</sup> Analytical and administrative costs added at 10% each

Toxicological Studies	Fleischer List Cost of study	Study Cost based on Fleischer List value as available and adjustments in "Comments"	Revised cost <sup>1</sup>	50% Deduction for Cost for REACH use only	Comments
Hazleton / Shaw. (1988) 104-week oral (drinking water) combined chronic toxicity and carcinogenicity study in the rat and mouse					Supporting Study; not key study given the critical endpoint coverage in the Owen inhalation study. <b>No compensation sought.</b>
E. I. du Pont de Nemours and Company (2000). Vinyl Acetate: Subchronic Toxicity 90-Day Drinking Water in Rats and Mice.					Supporting Study; not key study given the critical endpoint coverage in the Owen inhalation study. <b>No compensation sought.</b>