

*This is a free translation into English of a report issued in French and it is provided solely for the convenience of English-speaking users.*

**Total**

September 2017

Independent assurance report on the award of the "Total Ecosolutions" label to the "pure or formulated paraffin oil CAS 64742-46-7, CAS 97862-82-3 and CAS 72623-86-0 for phytosanitary use" products



## Total

September 2017

### Independent assurance report on the award of the "Total Ecosolutions" label to the "pure or formulated paraffin oil CAS 64742-46-7, CAS 97862-82-3 and CAS 72623-86-0 for phytosanitary use" products

Further to your request, we have performed a review in order to obtain reasonable assurance that the "pure or formulated paraffin oil CAS 64742-46-7, CAS 97862-82-3 and CAS 72623-86-0 for phytosanitary use" products, a description of which can be found on the web site [www.total.com](http://www.total.com)<sup>1</sup> and in the external datasheet dated August 22, 2017, has obtained the "Total Ecosolutions" label in accordance with the version 5 of the "Total Ecosolutions Guidelines" dated June 22, 2016 (hereafter referred to as the "Guidelines"); the Guidelines, which can be downloaded from the web site [www.total.com](http://www.total.com)<sup>1</sup>, have been established on the basis of the ISO 14020 and ISO 14021 standards and were the subject of a preliminary external review which gave rise to the issue of an independent report on their design, this report also being accessible on [www.total.com](http://www.total.com)<sup>1</sup>.

We conducted our review in accordance with international standard ISAE 3000 (International Standard on Assurance Engagements) defined by IFAC (International Federation of Accountants). It is the responsibility of Total to regularly update the Guidelines, to ensure that they are made available to internal users and third parties, and to apply the Guidelines. It is our responsibility to express, on the basis of our review, a conclusion on the award of the "Total Ecosolutions" label to the "Total Ecosolutions" label to the "pure or formulated paraffin oil CAS 64742-46-7, CAS 97862-82-3 and CAS 72623-86-0 for phytosanitary use" products.

### Nature and scope of our review

To express our conclusion, we performed the following review:

- We have assessed the reliability, accuracy, understandability, neutrality, completeness and relevance of the Guidelines and the constituents of the "Total Ecosolutions" label request file for products and services.

<sup>1</sup> Exact address: [www.ecosolutions.total.com](http://www.ecosolutions.total.com)  
449 142 348 R.C.S. Nanterre

Société d'expertise comptable inscrite au Tableau  
de l'Ordre de la Région Paris - Ile-de-France  
Membre du réseau Ernst & Young Global Limited

Siège social : 1-2, place des Saisons - 92400 Courbevoie - Paris - La Défense 1

- We have conducted interviews with the persons in charge of preparing the label request file, and analyzed the documentation available (aiming at justifying the methods of evaluation of the products overall environmental impact and of the comparative performance evaluation with the reference product). We have also reviewed the meeting minutes and documents used during the validation process by the "Total Ecosolutions" Labelling Committee and the Total Ecosolutions Management Committee, in order to identify any risks of deviation in relation to the label award process defined in the Guidelines. However, the scope of our work did not include the verification of data used as sources for the calculation.

To conduct the aforementioned procedures, we called on members of our teams specialized in environment and sustainable development.

### Information or explanations

- The Guidelines aim to define the rules for awarding the "Total Ecosolutions" label, the organization and responsibilities, the methods for assessing the level of environmental performance and verifying the compliance with the Guidelines, the internal and external communication procedures as well as the rules for document management, in accordance with the requirements of the ISO 14020 and ISO 14021 standards.
- "Pure or formulated paraffin oil CAS 64742-46-7, CAS 97862-82-3 and CAS 72623-86-0 for phytosanitary use" products are petroleum fractions obtained by desulphurisation, dearomation and distillation used as insecticide, miticide or fungicide. They have the particularity of having a physical mode of action instead of a chemical one. These oils are biodegradable, non-classified for health and the environment and do not cause resistance phenomena.
- The assessment of the environmental and health performance of "pure or formulated paraffin oil CAS 64742-46-7, CAS 97862-82-3 and CAS 72623-86-0 for phytosanitary use" products is made through the comparison, for an equivalent service provided, with all chemical pesticides that are authorized on the European market.
- The environmental and health performance of "pure or formulated paraffin oil CAS 64742-46-7, CAS 97862-82-3 and CAS 72623-86-0 for phytosanitary use" products is assessed through a quantitative assessment of their biodegradability (OECD 301 norm), on the basis of their absence of classification for the environment and human health (under the GHS), taking into account the risks for operators and consumers and on the basis of the non-appearance of resistance phenomena.
- The quantity of paraffin oil needed for the treatment of an agricultural area is higher than that of a chemical pesticide for the same function. Therefore, the use of paraffin oil increases energy consumption and greenhouse gas emissions compared to the reference product. This transfer of impact is considered insignificant as regards of health and other environmental gains.
- The significant benefit considered significant and validated by the "Total Ecosolutions" Management Committee of "pure or formulated paraffin oil CAS 64742-46-7, CAS 97862-82-3 and CAS 72623-86-0 for phytosanitary use" products in comparison with the reference product is its absence of classification for the environment and human health, its biodegradability and its absence of resistance phenomena on targeted species.



Ernst & Young et Associés  
Tour First  
TSA 14444  
92037 Paris - La Défense cedex

Tél. : +33 (0) 1 46 93 60 00  
[www.ey.com/fr](http://www.ey.com/fr)

## Opinion

In our opinion, "Total Ecosolutions" label to the "pure or formulated paraffin oil CAS 64742-46-7, CAS 97862-82-3 and CAS 72623-86-0 for phytosanitary use" products have been awarded the "Total Ecosolutions" label, in all its significant aspects, in accordance with the Guidelines.

Paris-La Défense, 4 septembre 2017

ERNST & YOUNG et Associés  
Sustainability Services

Christophe Schmeitzky