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Total
April 2020

Independent assurance report on the award of the “Total Ecosolutions” label to the “ALTEK ECO² B” product

EY & Associés

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Further to your request, we have performed a review in order to obtain reasonable assurance that the “ALTEK ECO² B” product, a description of which can be found on the web site www.total.com¹ and in the external file dated December 18th, 2019, has obtained the “Total Ecosolutions” label in accordance with the “Total Ecosolutions Guidelines” in its version 6 dated October 24th, 2019 (hereafter referred to as the “Guidelines”). The Guidelines, an abridged version of which can be downloaded from the web site www.total.com¹, 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.com¹.

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 “ALTEK ECO² B” product.

Nature and scope of our review

To express our opinion, we performed the following procedures:

- We have assessed the consistency, accuracy, understandability, neutrality, completeness and relevance of the Guidelines and of the constituents of the “Total Ecosolutions” label request file for products and services.
- We have conducted interviews with people in charge of preparing the label request file, and analyzed the available documentation (aiming at justifying the methods of evaluation of the product’s overall environmental impact and of the comparative performance evaluation with the reference product). We have also reviewed the documents used during the validation process by 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.

¹ Exact address: www.ecosolutions.total.com

Information or explanations

- The Guidelines aim to define the rules for the award of 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 ISO 14020 and ISO 14021 standards.
- The “ALTEK ECO² B” product is a bitumen obtained from direct distillation with additivation, used as a hot bituminous binder, and designed for the bonding of waterproofing membrane and heat insulators for roofing, the application temperature being lower by 70°C in average than for oxidised bitumen.
- The assessment of the environmental and health performance of the "ALTEK ECO² B" product was performed through a comparison, for an equivalent service provided, with a standard oxidised bitumen applied without thermoregulatory system used for roof insulation and waterproofing.
- The comparative assessment of the global environmental impact of the “ALTEK ECO² B” product was performed through a Life Cycle Analysis (LCA) in order to quantify greenhouse gas emissions and energy consumption reduction. The reduction of Polycyclic Aromatic Hydrocarbons (PAC) emissions was quantified based on a study conducted by an independent laboratory, by comparing HAP emissions produced by the application of the “ALTEK ECO² B” product and the standard oxidised bitumen.
- The functional unit considered is: “to bond 175 m² of a waterproofing membrane or heat insulator, with a load of 6 kg/m² applied by 3 persons during a working day of 6h using a bitumen technology, for a period of 10 years”, which corresponds to standard practices in the business.
- The benefit considered significant and validated by the “Total Ecosolutions” Management Committee is a reduction, calculated over the lifecycle of the product, of the energy consumption ranging of 27%, and of greenhouse gases emissions of 32%, as well as a reduction of the impact on health, which translates into a reduction by a factor 14 of PAC emissions during the application phase (at the recommended temperature of 160 °C). During this application phase in particular, the reduction of the energy consumption and greenhouse gases emissions is of 58%.

Conclusion

In our opinion, the "ALTEK ECO² B" product has been awarded the "Total Ecosolutions" label, in all its significant aspects, in accordance with the Guidelines.

Paris-La Défense, April 17, 2020

EY & Associés
Sustainability Services



Christophe Schmeitzky