

## Carbon Balloon Label Certificate

related to Hyosung Advanced Materials Corporation  
Carbon Footprint Report 2020

### Terms of Engagement

This Assurance Statement has been prepared for Hyosung Advanced Materials Corporation in accordance with our contract.

Lloyd's Register Quality Assurance Ltd. (LR) was commissioned by Hyosung Advanced Materials Corporation (HAMC) to verify "The Carbon Footprint Report of Tire Cords" (hereafter referred to as the CFP Report). The CFP Report relates to the product-related life cycle greenhouse gas (GHG) emissions associated with the tire cord using various types of fabrics such as PET, NYLON-6, NYLON-66 and LYOCELL tire cords (the Product), which is manufactured by HAMC at 30, Napdo-ro, Nam-gu, Ulsan, Korea.

The CFP Report relates to data collected for the calendar year from Jan. 2020 to Dec. 2020 for the partial life cycle (Business-to-Business) GHG emissions associated with the Product.

### Management Responsibility

While HAMC is responsible for preparing the CFP Report, HAMC remains responsible for maintaining effective internal controls over the data and information disclosed. LR's responsibility was to carry out an assurance engagement on the CFP Report in accordance with our contract with HAMC. Ultimately, the CFP Report has been approved by and remains the responsibility of HAMC.

### LR's Approach

LR's verification has been conducted in accordance with LR's verification approach to provide a limited level of assurance that the Report has been prepared in conformance with PAS 2050:2011 *Specification for the assessment of the life cycle GHG emissions of goods and services*.

To form our conclusions the assurance was undertaken as a sampling exercise and covered the following activities:

- Interviewed key people responsible for the management of GHG data and information and for the preparation of the CFP Report;
- Conducted a site tour of the manufacturing facility and reviewed processes related to the management of GHG data and records; and
- Verified the historical GHG data and information on aggregated level for the calendar year from Jan. 2020 to Dec. 2020.

### Level of Assurance & Materiality

The opinion expressed in this Assurance Statement has been formed on the basis of a limited level of assurance and a qualitative level of materiality of LR professional judgement for secondary and proxy data.



### LR's Opinion

Based on LR's approach, nothing has come to our attention that would cause us to believe that:

- the product-related life cycle GHG emissions associated with the functional unit of the product recorded in the CFP Report for the calendar year Jan. 2020 to Dec. 2020 are not materially correct;
- the functional unit figures are not based on production; and
- the CFP Report has not been prepared in accordance with PAS 2050:2011.

Dated: 30 August 2021

### Total life cycle GHG emissions

| Various types of fabrics | Functional unit<br>(product sale unit ) | Total Lifecycle GHG<br>Emissions<br>(kgCO <sub>2</sub> -eq per kg) | Total Lifecycle GHG<br>Emissions<br>(kgCO <sub>2</sub> -eq per kg)<br>(to 2 Significant Figures as<br>required by PAS 2050:2011) |
|--------------------------|---|--|--|
| PET tire cords           | kgCO <sub>2</sub> -eq per kg            | 5.78E+00   | 5.8E+00  |
| NYLON-6 tire cords       | kgCO <sub>2</sub> -eq per kg            | 1.01E+01   | 1.0E+01  |
| NYLON-66 tire cords      | kgCO <sub>2</sub> -eq per kg            | 8.89E+00   | 8.9E+00  |
| LYOCELL tire cords       | kgCO <sub>2</sub> -eq per kg            | 7.19E+00   | 7.2E+00  |

Approval

Certificate No: SEO00000492



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