

PRODUCT CARBON FOOTPRINT STATEMENT

Applicant Name	Rengkas Maju (M) Sdn Bhd
Applicant Address	Lot 10000, Mukim, 78200 Masjid Tanah, Melaka
Product Name	Re-refined base oil
Product Model	SN 150
Verification Requested	ISO 14064/2
System Boundary	Cradle-to-Gate
Functional Units	kgCO ₂ eq associated with production of 1 kg SN150 base oil
Coverage Period	25/3/2025 - 25/3/2027
Conclusion	According to the data provided by applicant, the GHG emission was 3.49 kgCO ₂ e/kg of base oil.



Confirmed By:
Ts. R. Puvaneswari

Date:
25/3/2025

SCOPE

Rengkas Maju (M) Sdn Bhd has engaged GTS to conduct quantification of the GHG emissions for the SN150 base oil, ensuring conformance with the principles of ISO 14064/2 as outlined below:

Title or description of activities	Quantification of Cradle to gate of GHG emission for production of SN150 base oil.
Product Category Rule	NIL
Functional Unit	kgCO ₂ eq associated with production of 1 kg of SN150 base oil
System Boundary	Cradle to Gate The boundaries considered in this assessment includes from the transport of input materials, the manufacturing processes and packaging of final product.
Data resources	Primary data were collected from the production of base oil; secondary data were collected from DEFRA, Articles and Journal, and Reports.
Quantification Tool	GHG quantification is calculated by using EXCEL
Manufacturing Location	Lot 10000, Mukim, 78200 Masjid Tanah, Melaka
Types of GHGs included	CO ₂ , CH ₄ , N ₂ O, Substances controlled by the Montreal Protocol, HFCs, PFCs, Fluorinated ethers, Perfluoropolyethers, Hydrocarbons compounds.
Coverage Period	25/3/2025 - 25/3/2027
Intended use of the statement	NIL

Confidentiality

1. This PCF statement has been prepared by GTS based on the data has been given by client.
2. This PCF statement does not exempt the client from their obligation to comply with national laws, regulations, or any applicable international guidelines
3. The client and GTS are independent entities; the client is not represented by GTS, nor is GTS obligated to represent the client to any other organization or body. This PCF statement shall not impose any binding obligation on GTS, and GTS shall not be held liable to any party other than its client.

Conclusion

GTS has quantified the GHG emission based on ISO 14064/2. The emission of production SN150 base oil is as tabulated below:

Process Name		Production of Re-refined Base oil		
PCF Unit		per kg of SN150 base oil		
Functional Unit		per kg of SN150 base oil		
Model		SN 150		
PCF Unit (unit: kg of CO ₂ e)				
Unit	Transportation	Packaging	Operation	Functional Unit of 1 kg of base oil
per kg of SN150 base oil	304,430.61	180,480	94,419,325.5	3.49