

REVIEW REPORTING

General Information		
Data set name	Polyethylene terephthalate (PET), petrochemical based; polymerisation of ethylene glycol and terephthalic acid; production mix, at plant; petrochemical based	
Data set location	GLO	
Data set UUID and version number	00a5d0c8-becf-520a-b3fe-eb0710efa170; 04.00.001	
Data set locator (e.g. Permanent URI, URL, contact point, or database name and version, etc.)	ecoinvent LCDN node (http://ecoinvent.lca-data.com/) EF3_0_Chemicals	
Review commissioner(s)	Consortium: ecoinvent Association, Blonk Consultants and PRé Sustainability	
Reviewer name(s) and affiliation(s), contact	Internal reviewer: Emilia Moreno Ruiz, ecoinvent Association, moreno@ecoinvent.org Internal reviewer: Katarzyna Cenian, PRé Sustainability, cenian@pre-sustainability.com External reviewer: Eric Johnson, Atlantic Consulting, ejohnson@ecosite.co.uk	
Review type applied, and compliance with EF requirements for review	Review type 1: at least 3 independent reviewers, with at least 1 external.	
Method used for review , and review scope	The review was split as follows among the different reviewers as described below: External reviewers have been asked to provide their expertise in the field of interest. External reviewers have been asked to review the unit process, including eventual methodological choices, the LCIA scores (provided with contribution scores as well), and DQRs. External reviewers have been provided all the information in a tool developed by the consortium for the purpose of this project. Internal reviews have been asked to review the plausibility of the unit process, LCIA scores, and DQRs. Internal reviewers have also been asked to review the data for EF compliancy. The consortium is therefore responsible for aspects such as compliancy with the ILCD format, including validation in Look@LCI, and nomenclature.	
Date of review completion	22/07/2021	
Reviewed against/Compliance system name	Simone Fazio, Luca Zampori, An De Schryver, Oliver Kusche, Lionel Thellier, Edward Diaconu. Guide for EF compliant data sets, Version 2.0 Luxembourg, 2020, ISBN 978-92-76-17951-1 (online), doi:10.2760/537292 (online), JRC120340.	
Compatibility with EF reference package (Version)	EF REFERENCE PACKAGE 3.0	
OVERALL COMPLIANCE ASSESSMENT		
Aspect	Compliant	Comments

Compliance with specific EF requirements	yes	The data set is compliant with all requirements of the reference documents (PEF/OEF implementation, mandatory data 2016-2021; ILCD Data Network - Entry-level; Suggestions for updating the PEF method 2019; ISO 14040 Environmental Management – Life Cycle Assessment – Principles and Framework, 2006; ISO 14044:2006. Environmental Management – Life Cycle Assessment – Requirements and guidelines; Environmental Footprint 3.0). The documentation is complete and clearly describes how the requirements have been applied in the data set. All modelling constants follow the requirements listed in the Guide for EF compliant data sets version 2. Compliance is correctly reported in the Modelling constants section of the process.
Allocation rules clearly explained and consistent	yes	Allocation rules are clearly explained in the Modelling constants section of the process. Allocation follows the rules set in the Guide for EF compliant data sets version 2, including the application of the CFF formula where necessary.
Circular Footprint Formula (correct implementation)	yes	Where applicable, reviewers have checked the applicability of the values of Annex C of the transition phase, and the choice of datasets used for the datasets needed to implement the CFF. Information about the CFF implementation is clearly reported under the section Deviation from LCI method approaches.
LCIA results consistency	yes	The LCIA scores have been compared to the ones resulting from the calculations in the Look@LCI tool. No discrepancy over 1% have been identified.
Nomenclature	Comments	
Correctness and consistency of applied nomenclature (use of Specific EF reference package; Correct nomenclature of other flows, processes etc;)	Only flows from the EF3.0 package have been used in this dataset, all flows are included. Flow have only been excluded if no appropriate flow was identified in the EF3.0 package.	
Documentation	Comments	
Appropriateness of documentation. See Document 'Documentation of LCA data sets' and additional EF data guidelines.	The documentation of the datasets is clear and describes in adequate detail what type of production the dataset represents.	
Appropriateness / correctness of documentation format (ILCD Format)	The documentation is appropriate and in the correct format (the ILCD format).	
Validation with ILCD validator	yes	

DQRs	yes	The overall quality of the dataset has been calculated from the individual scores. Individual scores are generally based on a contribution analysis of important flows, but evaluated and confirmed or adjusted by the external reviewer. The overall quality of this process is: 1.49
Cut-off	Eventual cut-offs are in compliance with the Guide for EF compliant data sets (JRC 2020), i.e. only if below the 3% cut-off rule.	

Documents referred or accessed by the reviewer (references also for unpublished documentation)

Sources:

- Simone Fazio, Luca Zampori, An De Schryver, Oliver Kusche, Lionel Thellier, Edward Diaconu. Guide for EF compliant data sets, Version 2.0 Luxembourg, 2020, ISBN 978-92-76-17951-1 (online), doi:10.2760/537292 (online), JRC120340.
- ILCD Data Network - Entry-level
- Environmental Footprint 3.0 package

Compliance declaration:

"The reviewer(s) declare on his/her (their) responsibility that the reviewed data set is/~~is~~ ~~not~~ compliant with the Environmental Footprint general and specific compliancy rules."

Reviewers' signature

Name Surname Emilia Moreno Ruiz



Name Surname Katarzyna Cenian



Name Surname Eric Johnson

