REVIEW REPORTING	
General information	
Data set name	Alkyd resin dispersion (self emulsified); technology mix; production mix, at plant; without water
Data set UUID and version number	Aggregated: 6e0fa93b-d3e2-4abb-9655-44f4fa6172e0 Disaggregated: 4900e033-cb2b-41a4-be3d-d1312c4e0170 Version number: 03.00.001
Data set locator	CEPE LCDN node: Chemicals for Paints datasets for PEF calculations, reference package EF3.0; https://lcdn-cepe.org/
Review commissioner(s)	The European association of Paint, Printing Inks and Artists' colours manufacturers (CEPE)
Reviewer name(s) and affiliation(s), contact	Max Sonnen, Ecomatters B.V., max.sonnen@ecomatters.nl; Natalia Chebaeva, Ecomatters B.V., natalia.chebaeva@ecomatters.nl
Review type applied, and compliance with EF requirements for review	Review type 2, EF review compliance fulfilled.
Method used for review , and review scope	The review focuses on the update of the dataset due to the EF reference package update. Selective review is performed covering only the points and parameters updated. The underlying general model was reviewed, with spot check of some parameters in all data sets. Suggestions for the dataset documentation were provided, discussed, and implemented. Review was carried out with study of the provided data set ILCD files, data set documentation, a series of dialogues with the data set developer and data entry practitioner, and additional information provided by data entry practitioner on request.
Date of review completion	22.04.2022
Reviewed against/Compliance system name	PEF/OEF
Compatibility with EF reference package (Version)	EF3.0 (3f5b0b56-60e6-4df7-869d-a811830386d9)
Overall compliance assessment	

Aspect	yes	no	comments
Compliance with specific EF requirements	X		Electricity modelling is not reviewed for the scope of changing EF reference package; update of the background dataset for electricity is verified. Climate change modelling is not reviewed for the scope of changing EF reference package; no changes expected in the update. Agricultural modelling is not reviewed for the scope of changing EF reference package; no changes expected in the update. Transport is accounted for in the background processes used as proxies as documented. As such, it is included in the black box modelling within the partially disaggregated process. The modelling

			diviates from the EF modelling requirements and agreed upon with the data providers. Capital goods and their end of life are included as documented. Water flows are mainly regionalized, with separation of withdrawal, release and evaporation for both foreground and background. Non-regionalised water flows are explained as allocated to countries not covered by the EF reference package, according to the EF guidance. Land related flows are partially regionalised. Non-regionalised flows are possible to be allocated to countries not listed in the EF reference package. No duplicated or waste flows detected. No duplicated elementary flows detected.
Allocation rules clearly explained and consistent	NA		Not reviewed for the scope of changing EF reference package; no changes expected in the update
Circular Footprint Formula (correct implementation)	X		Reference product is assumed without recycled content, and is an intermediate product (end of life of the product is outside the system boundary). Circular footprint formula (CFF) is therefore not applied in the foreground modelling as not relevant. CFF application in the background system is assumed in accordance to the background data sets used (primarily, as concerns energy recovery in waste treatment), and is not included into the scope of review.
LCIA results consistency	X		LCIA results are reported consistently. Verification of the reported characterised results is done with Look@LCA. No discrepancies above 1% detected.
Nomenclature			
Correctness and consistency of applied nomenclature (use of Specific EF reference package; Correct nomenclature of other flows, processes etc.)	X		Nomenclature of the process and relevant flows is compliant (Reference package EF3.0), and applied correctly and consistently.
Documentation			
Appropriateness of documentation.	Information on the dataset name, UUID, reference flow and its qualities, technology and geographical covereage are indicated. Modelling choices and principles are listed (LCI method and approaches, cut-off, specific modelling), explanations are given to specific modelling and diviations from the EF guidance and listed principles. A link to the flow diagramme is included. Data selection principles, data treatment, data quality assessments are presented. LCIA per impact category are provided in		

	accordance to the EF3.0 reference package. Review details are given. Administrative data is sufficient, including publication and ownership, and intended applications. Provided range of documentation is EF compliant (with reservations), and allows for a fair assessment of the dataset. Provided metadata is detailed enough, and mainly respects ILCD entry-level and additional EF requirement. Diviations do not impede a fair assessment of the dataset use.		
Appropriateness / correctness of documentation format (ILCD Format)	Documentation format is appropriate, all required documentation fields are filled in providing the relevant metadata for the dataset. Documentation check tool applied, with no detected issues.		
Validation with ILCD Validation tool	X		ILCD validation tool is applied, no issues detected.
DQRs	NA		Provided DQR scores are not updated in the reference package update, in accordance with the section 3.6.5 of the tender. The existent EF2.0 DQR scores assessement was not reviewed. User is advised to consider the DQR with caution when using them without recalculation.
Cut-off	NA		Not reviewed for the scope of changing EF reference package; no changes expected in the update
Additional information	User is advices to take into account that packaging of the product is not included in the modelling, while transport and energy flows modelling is included, but accounted for in the blackbox.		

The reviewers declare on their responsibility that the reviewed data set is compliant with the Environmental Footprint general and specific compliancy rules, with the deviation notions provided.

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