

TOSCA 101191394
Manufacturing Processes and Digital **To**ols for more **S**ustainable **C**omposite **A**erostructures

Deliverable D3.1: "Thermoset Resin Formulation and Evaluation – Summary"

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SUMMARY

This Deliverable summarizes the work carried out on the formulation of an epoxy based vitrimer and the development of enduring tapes, based on specifications regarding Tg and dynamic behavior, as well as processing requirements for producing carbon fiber (CF) tapes and laminates via Automated Fiber Placement (AFP). The document includes information on the specifications defined for the vitrimer and its processing, the corresponding vitrimer formulation and characterization, and the prepreg and tape production processes studied and optimized to obtain CF tapes for subsequent tasks and work packages. Preliminary results regarding recycling processes are also included.