SUBLIME

Solid state sUlfide Based LI-MEtal batteries for EV applications

D3.3 Report on delivery of 10 kg batches for WP5

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Sublime is funded by the European Union's H2020 research and innovation programme under GA Agreement no. 875028

Publishable summary

In the frame of the WP3 for materials optimisation and scaling up, batches representative of the ten kg scale of sulfide solid electrolyte have been synthesized on a large scale equipment developed and installed at Solvay.

Based on GEN-I and GEN-II materials developed by CEA and that exhibit limited conductivity features, choice was done to orient GEN-III toward sulfides with conductivity above 1 mS/cm. These compounds were first synthesized at 10 g and 100 g scale before up scaling with same quality at 1 kg scale. The final upscale in the framework of the SUBLIME project to a multi kilogram scale was done after definition of the relevant tools and working conditions to operate in full safety mode.

A multi kg batch with an ionic conductivity above 2 mS/cm at room temperature was produced and shipped to the WP5 partners.