SUBLIME

Solid state sUlfide Based LI-MEtal batteries for EV applications

Deliverable 5.1 Definition of safety conditions for material and electrodes scaling-up and shipments

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Publishable summary

The present document contains guidelines to reduce the risks associated with the use of sulfidic materials as well as metallic lithium. The risks and hazards of H_2S and metallic lithium are presented. Furthermore, the protection equipment and glovebox specifications are documented to avoid an H_2S release and a contact with metallic lithium. An appropriate storage of sulfidic materials and metallic lithium is described. Moreover, first aid measures are protocolled as well as firefighting measures. Handling protocols for the scaling up of sulfidic containing powder mixtures, electrode and separator preparations, and storage of electrodes and separators are listed.

Considering the research nature of the project, the guidelines are to be updated according to the progress made and the materials specifications. The protocols and guidelines should be reviewed by the relevant partners and adapted to fit local regulations and specific features at each laboratory.