

Links to hydrogen safety resources

Hydrogen fuel risks webinar
15 September 2023L

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- The Hydrogen Incidents and Accidents Database HIAD 2.0 is available as excel on the MAHB platform. <https://minerva.jrc.ec.europa.eu/en/shorturl/capri/hiadpt> . Some general lessons learned from the database can be found here:
- A recent scientific paper presenting an analysis of HIAD 2.0 data: <https://doi.org/10.1016/j.compchemeng.2023.108199>
- A scientific paper with learned lessons and recommendations from HIAD 2.0: <https://doi.org/10.1016/j.ijhydene.2022.03.170>
- A report of the **European Hydrogen Safety Panel**, with detailed background information on the assessment approach and the safety principles <https://www.clean-hydrogen.europa.eu/system/files/2021-09/Lessons%2520learnt%2520from%2520HIAD%25202.0-Final.pdf>
- A historical overview of the structure and the overarching goals of the database HIAD 2.0: a paper presented at the ICHS 2019 in Adelaide: <https://hysafe.info/uploads/papers/2019/116.pdf> .

An example of the use of HIAD 2.0 and of H2TOOLS for the return of experience on a specific application: the minutes of the **workshop on Safety of Electrolysis** organised by the Clean Hydrogen JU in 2020: tables 1 and 2 summarise all available accidents related to respectively chlorine and water electrolysis from HIAD and H2TOOLS: [20201118_MinutesWSSafetyOfElectrolysis_TJ_20210123-Final%20%28ID%2010568792%29.pdf](https://www.clean-hydrogen.europa.eu/system/files/2021-01/20201118_MinutesWSSafetyOfElectrolysis_TJ_20210123-Final%20%28ID%2010568792%29.pdf) ([europa.eu](https://www.clean-hydrogen.europa.eu)) and the workshop presentations: https://www.clean-hydrogen.europa.eu/media/news/results-fch-ju-workshop-safety-electrolysis-2021-01-29_en.

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- The EHSP has organised at the end of 2021 a **workshop on *hydrogen storage and the related infrastructure***. In that occasion I have performed a search and analysis of the related incidents, both in HIAD 2.0 and H2TOOLS. https://www.clean-hydrogen.europa.eu/system/files/2022-06/20211118_MinutesWSSafetyOfH2StorageMobility_del20220505%20%28ID%2013831529%29.pdf
- An example of the use of HIAD 2.0 and of H2TOOLS for the return of experience on a specific application: the minutes of the **workshop on *Safety of Electrolysis*** organised by the Clean Hydrogen JU in 2020: tables 1 and 2 summarise all available accidents related to respectively chlorine and water electrolysis from HIAD and H2TOOLS: [20210123-Final%20%28ID%2010568792%29.pdf \(europa.eu\)](https://www.clean-hydrogen.europa.eu/system/files/2021/10/20210123-Final%20%28ID%2010568792%29.pdf) and the workshop presentations: https://www.clean-hydrogen.europa.eu/media/news/results-fch-ju-workshop-safety-electrolysis-2021-01-29_en.
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