

Appendix 11 – Corrosion Properties of Fogging Fluids

A corrosion experiment was made to test the suitability of fogging liquids for use in the Laskin nozzle based seeding particle generator utilised in this project. As the pipes of the Laskin nozzles consist of normal carbon steel they would corrode when in contact with water, which mustn't occur.

Three specimens were cut from a steel rod and each of them placed in a separate jar containing water, Dick Smith fog juice and Le Maitre Global Mix fogging fluid. The experiment was run for more than 10 days, with Figures 1 - 3 showing the specimens after the experiment.

Surprisingly the Le Maitre Global Mix Fluid resulted in a considerable amount of corrosion on the specimen in contrast to the Dick Smith fog juice which only showed few traces of corrosion. As the components used in the Le Maitre fog fluid are kept "secret", it is difficult to judge why this is the case. The experiment also showed that the fogging fluids take far longer to evaporate than water which evaporated entirely.



Figure A11-1 Le Maitre Global Mix Fluid

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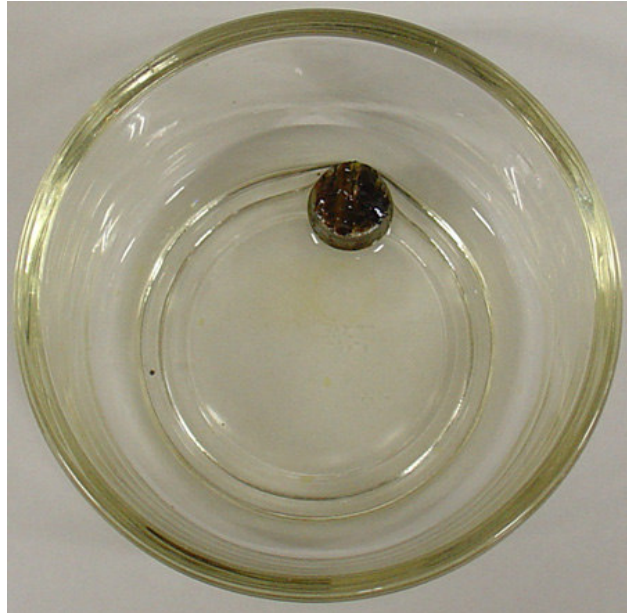


Figure A11-2 Dick Smith Fog Juice

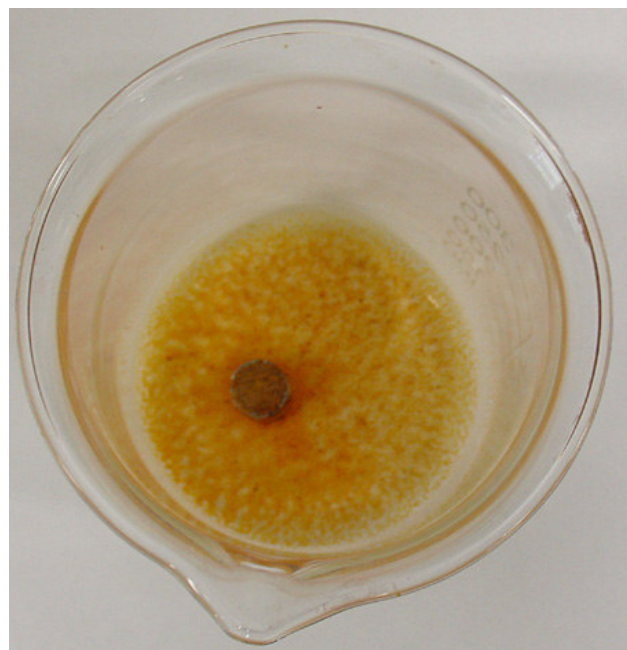


Figure A11-3 Water