

ZERTIFIKAT · CERTIFICATE



DARTSCH SCIENTIFIC GMBH Institute of Cell Biological Test Systems

herewith certifies that the product named

E-Liquid of the brand Happy Liquid with menthol and 18 mg/ml of nicotine

manufactured and distributed by

Happy People GmbH, D-80337 München, Germany

has been tested for its acute toxic effects by using *in vitro* tests with cultured human lung cells.

Results of the Test Assays

The investigations with cultured human lung cells (cell line A549) have shown that vaporising of the e-liquid did not cause a marked loss in cell vitality after simulation of 10 puffs (= 100 vol% primary extract) according to smoking one tobacco cigarette. In contrast, the smoke of only one tobacco cigarette caused death of nearly all cultured lung cells at even 10 times lower concentrations (= 10 vol% primary extract). Thus, the investigations demonstrate that vaporising of e-liquid of the brand Happy Liquid with menthol and 18 mg/ml of nicotine has a much lower acute toxic effect on cultured lung cells than the smoke of a tobacco cigarette.

Schongau: August 14, 2014

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