

# The recommended use of pH Neutral is a safe procedure

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pH Neutral is an effective neutralizing product dedicated to first aid of eye accidents with acids and alkali. Rapid neutralization after a splash of acid or alkali is essential for the recovery of the eye. pH Neutral consists of a phosphate buffer, which enables rapidly neutralization of even strong acids and alkali.

Several studies and case reports have shown a correlation between frequently administering phosphate buffer in injured eyes and corneal calcification<sup>1,2,3,4</sup>. This fact has led some to recommend avoidance of phosphate buffer also for initial rinsing of eyes<sup>3,4</sup>, even though no scientific study supporting this has been performed<sup>5</sup>.

Plum A/S is very concerned about the safety of their products and feels obligated to ensure that the use of pH Neutral is not combined with risk of corneal calcification. In cooperation with the University of Southern Denmark Plum A/S has performed a controlled, clinical study to investigate whether the recommended use (irrigation with pH Neutral for two minutes followed by irrigation with saline) of pH Neutral is safe. The study clearly showed that the use of pH Neutral is without risk of developing corneal calcification<sup>6</sup>.

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<sup>1</sup> Schrage NF, Schlossmacher B, Aschenbrenner W, Langefeld S. Phosphate buffer in alkali eye burns as an inducer of experimental corneal calcification 2001;27:459-464

<sup>2</sup> Bernauer W, Thiel MA, Kurrer M, Heiligenhaus A, Rentsch KM, Schmitt A, Heinz C, Yanar A. Corneal calcification following intensified treatment with sodium hyaluronate artificial tears. Br J Ophthalmol 2006; 90:285-288

<sup>3</sup> Kompa S, Redbrake C, Dunkel B, Weber A, Schrage N. Corneal calcification after chemical eye burns caused by eye drops containing phosphate buffer. Burns 2006;32:744-747

<sup>4</sup> Daly M, Tuft ST, Munro PMG. Acute corneal calcification following chemical injury. Cornea 2005;24(6):761-765

<sup>5</sup> Brandslund I, Damgaard AL. Corneal calcification after chemical eye burns caused by eye drops containing phosphate buffer. Burns 2008;34:1215

<sup>6</sup> Damgaard AL, Hovendal MP, Schrøder HD, Saxtorph H, Bollen P. First aid treatment of alkali eye burns with phosphate buffer does not cause corneal calcifications. Poster, EAPCCT XXIX International Congress in Stockholm, 2009