



Date: January 6th, 2023

TO WHOM IT MAY CONCERN

Regulatory interpretation vapour toxicity of concentrated nitric acid mixtures

The classification of nitric acid (Index No 007-030-00-3) has been harmonized in the European Union by Delegated Regulation (EU) 2020/1182. The harmonized classifications apply from March 2022. The classification for acute inhalation toxicity of nitric acid vapour is category 3 with an acute toxicity equivalent (ATE) of 2.65 mg/L (vapour). This substance classification applies to nitric acid dilutions of up to 70% in water.

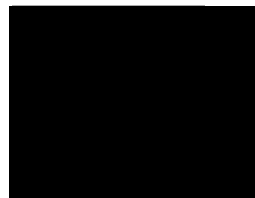
Some Diversey products are based on mixtures containing more than 26% nitric acid combined with other substances to achieve the desired performance. The correct classification for such mixtures requires a specific assessment taking in consideration the physical state and intended end-uses, all in combination with test data for the mixture and its substances¹.

The potential evaporation of nitric acid vapour from undiluted products is the critical effect for establishing the acute inhalation classification the mixture. Diversey requested a Contract Research Laboratory to characterize the test atmospheres according to the same OECD TG 403 protocol in which the vapour toxicity for nitric acid was identified. In this study, variations of Pascal VA5 containing almost 50% nitric acid combined with inhibitors were shown to primarily generate aerosol mists. This in contrast to the study that was the base for the new inhalation classification which primarily generated nitric acid vapour. Therefore these mixtures should be interpreted as liquids that may generate an aerosol mist.

The regulatory interpretation of this outcome is that because undiluted Pascal VA5 is a mixture, is not intended to be aerosolized and primarily generates mists when it would be aerosolized, the nitric acid classification as vapour is not relevant. Related mixtures like Divosan BG VS35, Acidplus VA35, Clearklens Dilac VH14, Divos 1 VM46, Super Dilac VA4 and Divosan OSA-N VS37 have even higher solid contents than Pascal VA5 which makes vapour classification even less relevant. Section 11 of Diversey safety data sheets indicate when this argumentation applies.

Although these concentrated nitric acid mixtures remain not regulated under the SEVESO III directive², they are corrosive mixtures for skin and metals and can generate nitrous gases after contact with weak metals and organics. We refer to our safety data sheet and product information for further safe use guidance.

If you have any further questions, please contact your Diversey sales representative.



Director Global Regulatory Strategy

¹ CLP regulation (EC) No 1272/2008, article 9(5)

² Control of major-accident hazards Directive 2012/18/EU