

# Test of cold asphalt storability based on alternative approaches

Zora Abaffyová<sup>1</sup> and Jozef Komačka<sup>2</sup>

<sup>1</sup>CESTY NITRA a.s. Groupe COLAS, Murgašova 6, 949 78 Nitra, Slovakia

<sup>2</sup>Žilinská univerzita v Žiline, Univerzitná 8215/1, 010 26 Žilina, Slovakia

E-mail: [jozef.komacka@fstav.uniza.sk](mailto:jozef.komacka@fstav.uniza.sk)

**Abstract.** Cold asphalt products for potholes repairs should be workable (soft enough) for long time to ensure their applicability. Storability is assessed indirectly using various tests of workability. Therefore, simple test methods (self-compaction and disintegration test) was developed and verified to investigate changes of storability of this group of cold asphalts. Self-compaction of the tested mixture in the upturned Abram's cone for the cement concrete slump test and in the mould for the California Bearing Ratio test was assessed in first stage. After that the video record of disintegration test was taken. During this test, the mould was lifted up and the mixture fell off the mould (Abram's cone) or disintegrate (CBR mould). The drop of surface after 10 min self-compaction and netto time related to falling out or disintegration of the mixture were used to evaluate the mixture from storability point of view. It was found out the self-compaction test has not a potential to reveal and prove changes of mixture properties. Based on the disintegration test results it can be stated this test at 5 °C using the upturned Abram's cone could be a suitable approach to determine qualitative changes of a cold mixture from storability point of view.