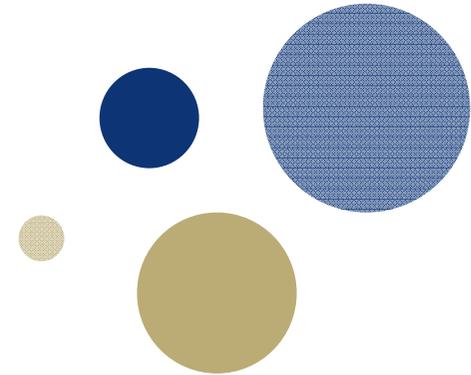




**NTNU – Trondheim**  
Norwegian University of  
Science and Technology



# Bestandighet av asfalt

Asfaltdagen 2015

Sara Anastasio

*Department of Civil and Transport Engineering,  
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*miljøkrav*

klimateffekten

klimateffektene

utslipp

klimateffektene

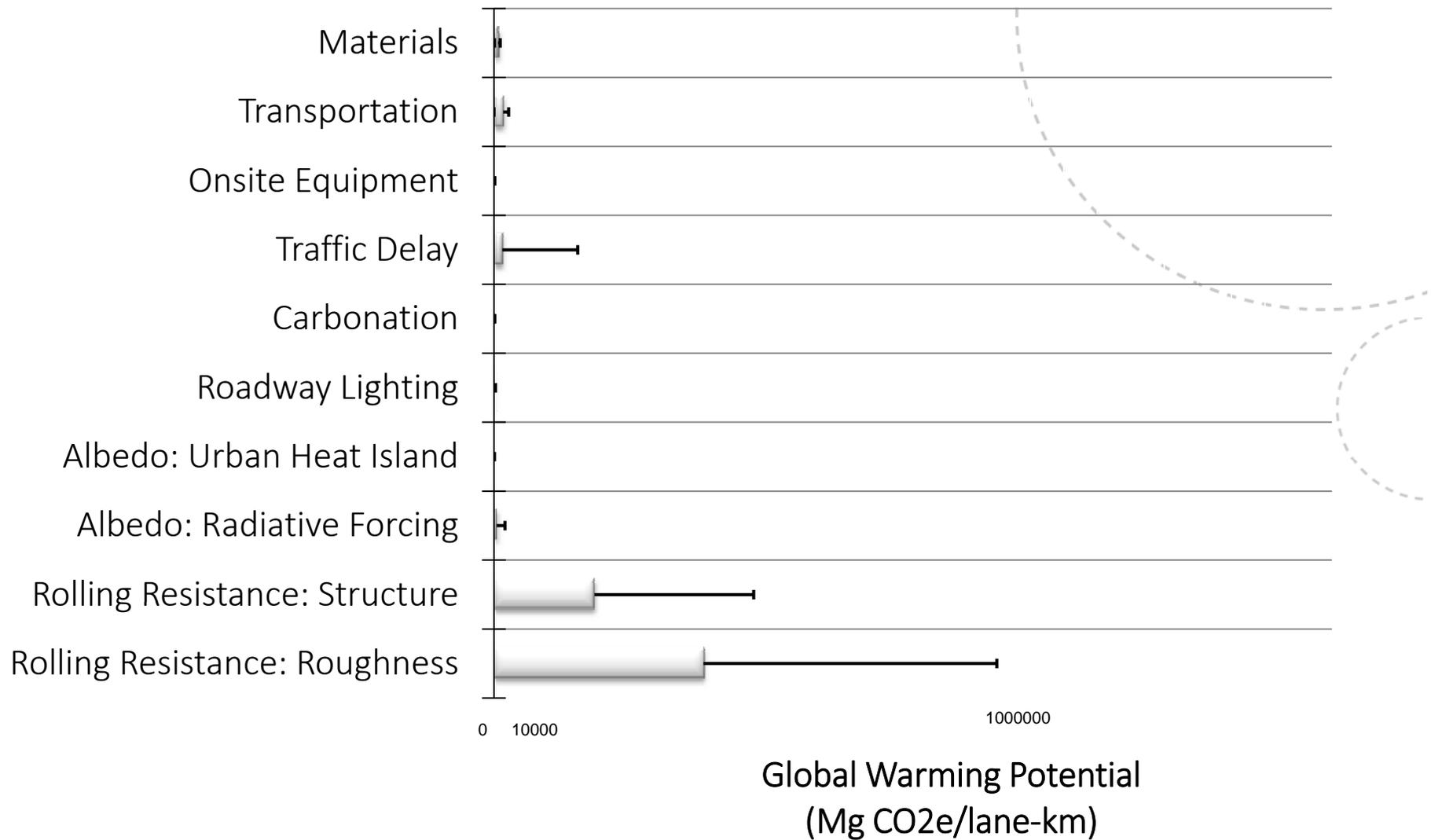
**energibruk**

CO<sub>2</sub>

miljøpåvirkning

*RAP<sup>(\*)</sup>!*

(\*) Reclaimed Asphalt Pavement



Courtesy Santero et al.



*“The use phase of the life cycle accounts for 3% – 85% of greenhouse gas emissions”*

MIT Concrete Sustainability Hub, 2010

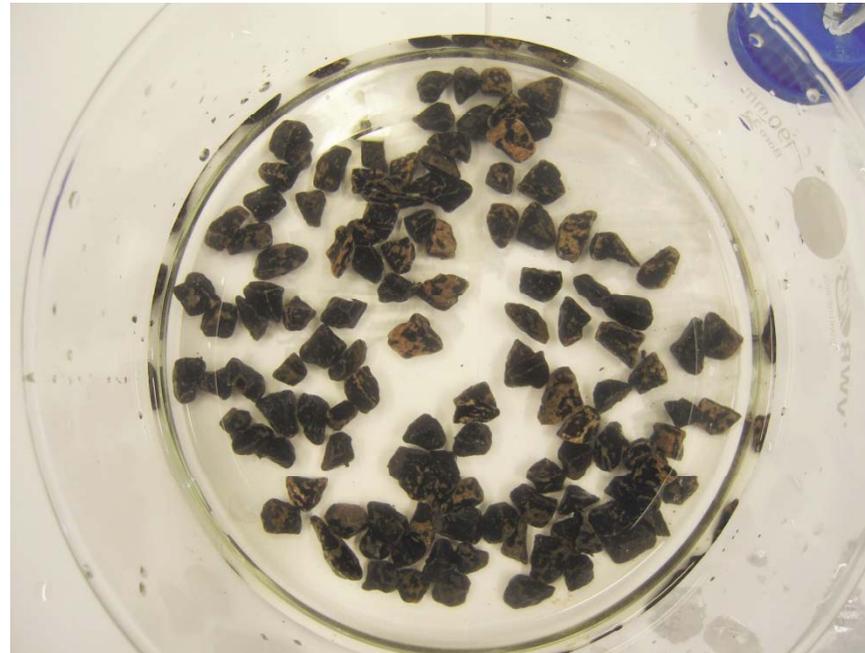
*RAP!*<sup>(\*)</sup>

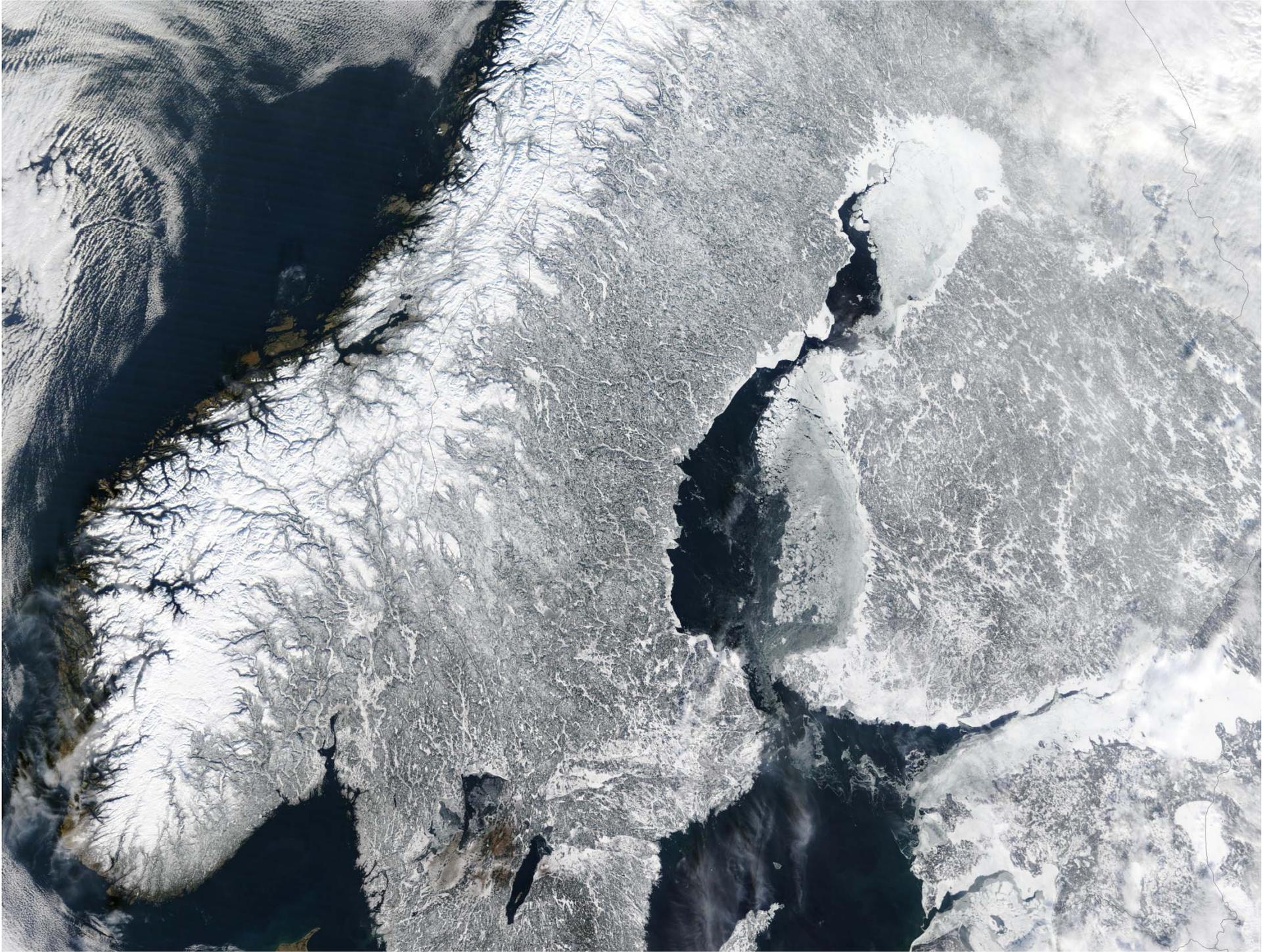
(\*)Remember (the) Asphalt Performance

# NABin 2014

Ny vedheftstest

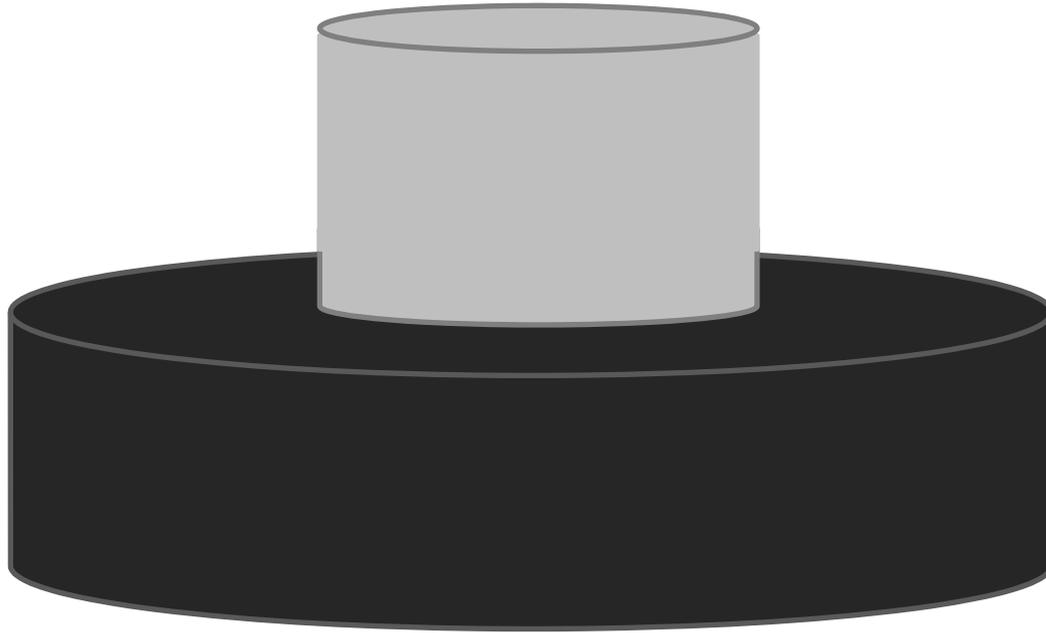
→ Sara Anastasio, NTNU







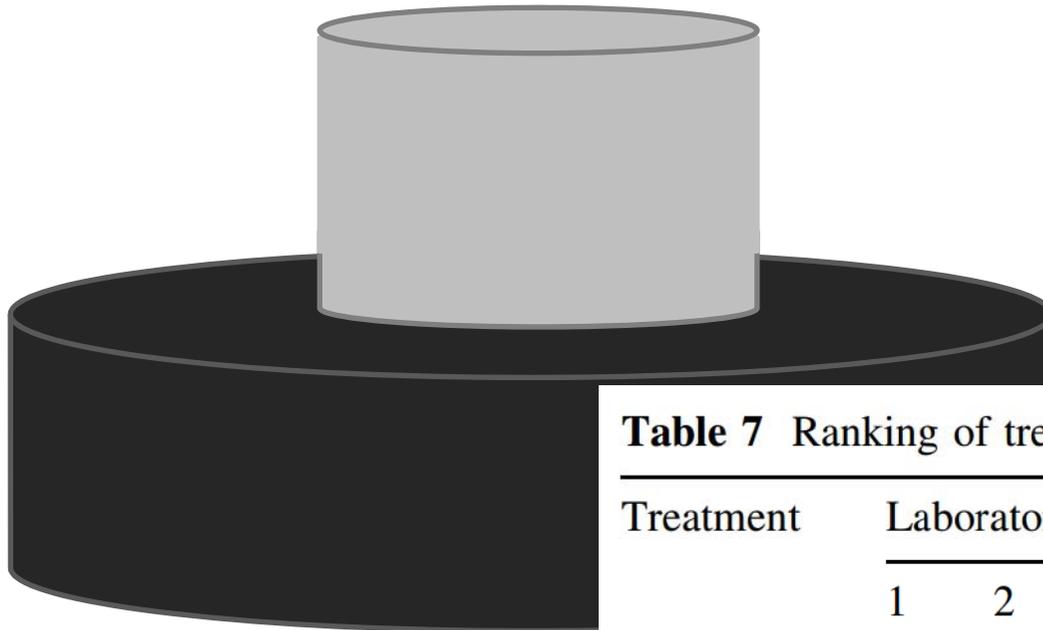
EN 12697-41



*Precision of method for determining resistance of bituminous mixtures to de-icing fluids*

Jonas Ekblad, Ylva Edwards

Materials and Structures (2008) 41:1551–1562



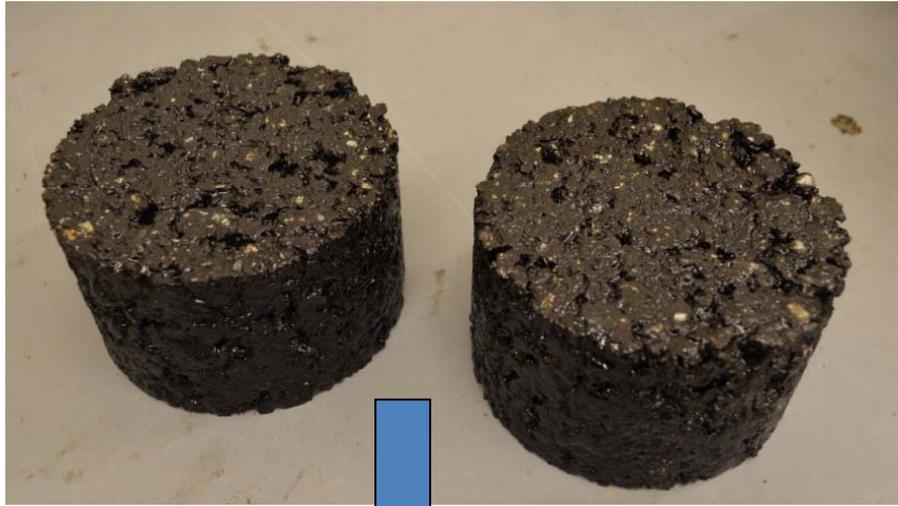
**Table 7** Ranking of treatments using fracture ratios

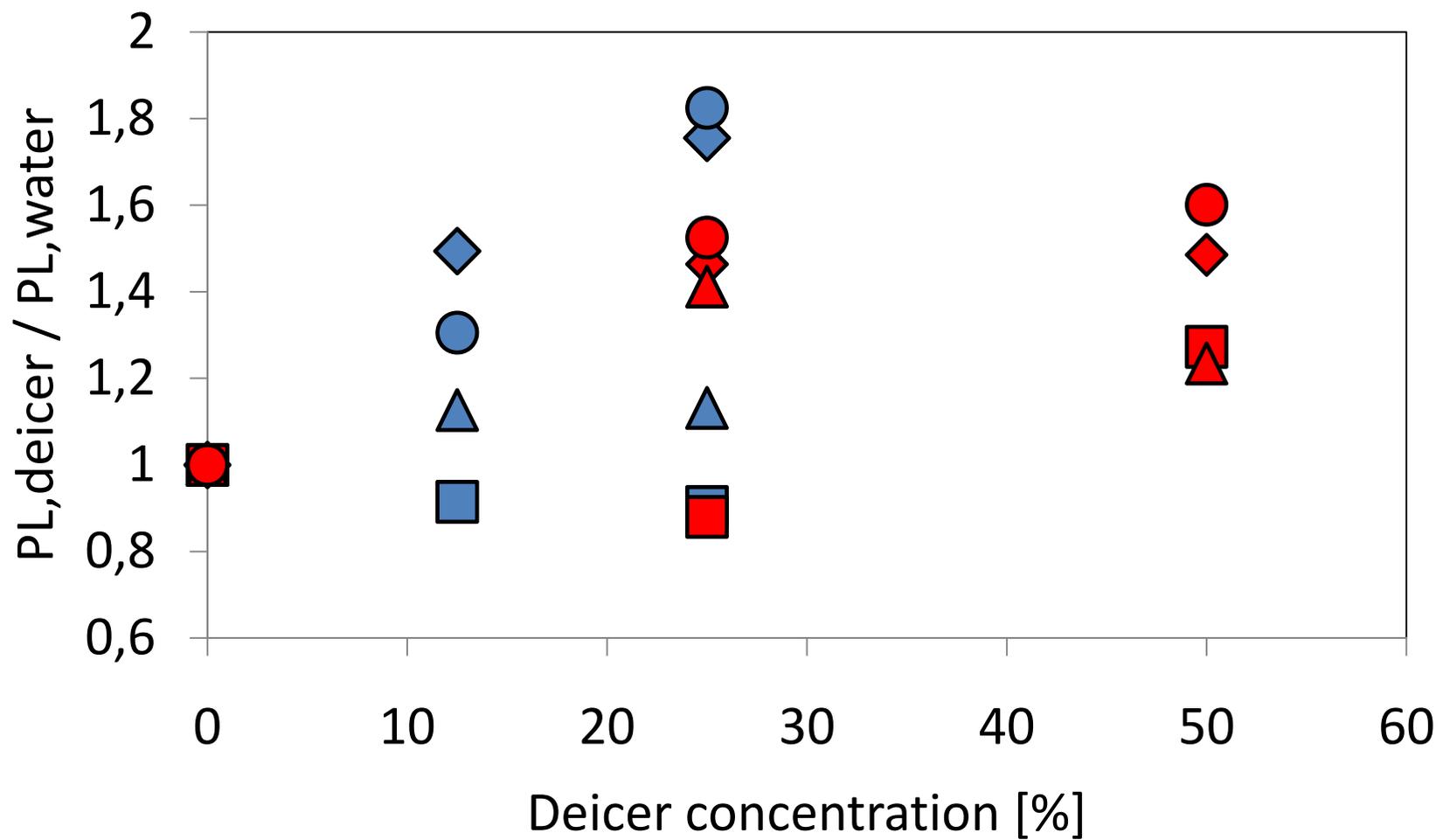
Treatment	Laboratory						Mean rank
	1	2	3	5	6	8	
KA	2	3	3	1	1	1	1.8
KF	1	1	2	2	2	2	1.7
MP1	3	2	1	3	3	3	2.5
NaFo	5	5	5	5	5	5	5.0
Water	4	4	4	4	4	4	4.0

*Precision of method for determining resistance of bituminous mixtures to de-icing fluids*

Jonas Ekblad, Ylva Edwards

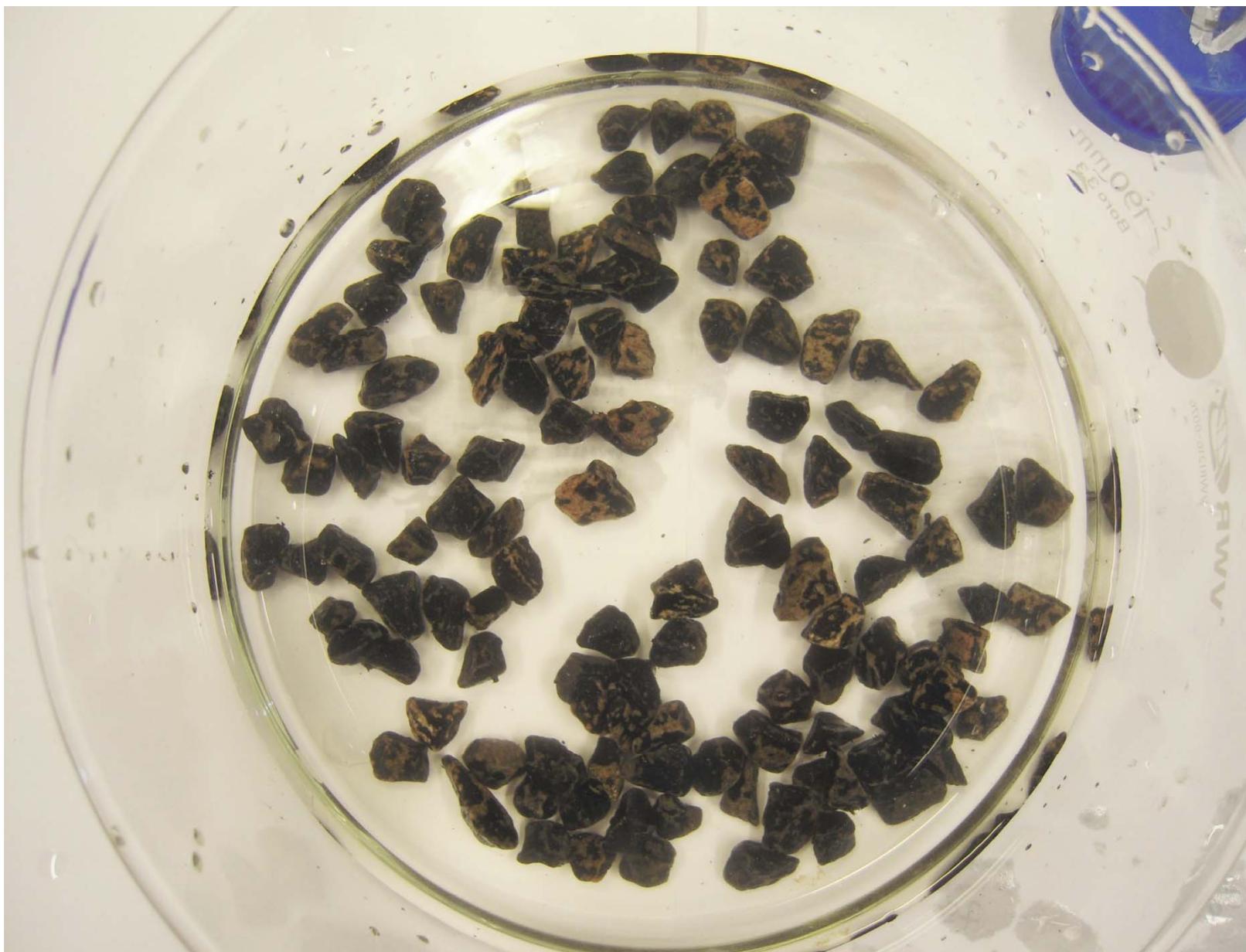
Materials and Structures (2008) 41:1551–1562

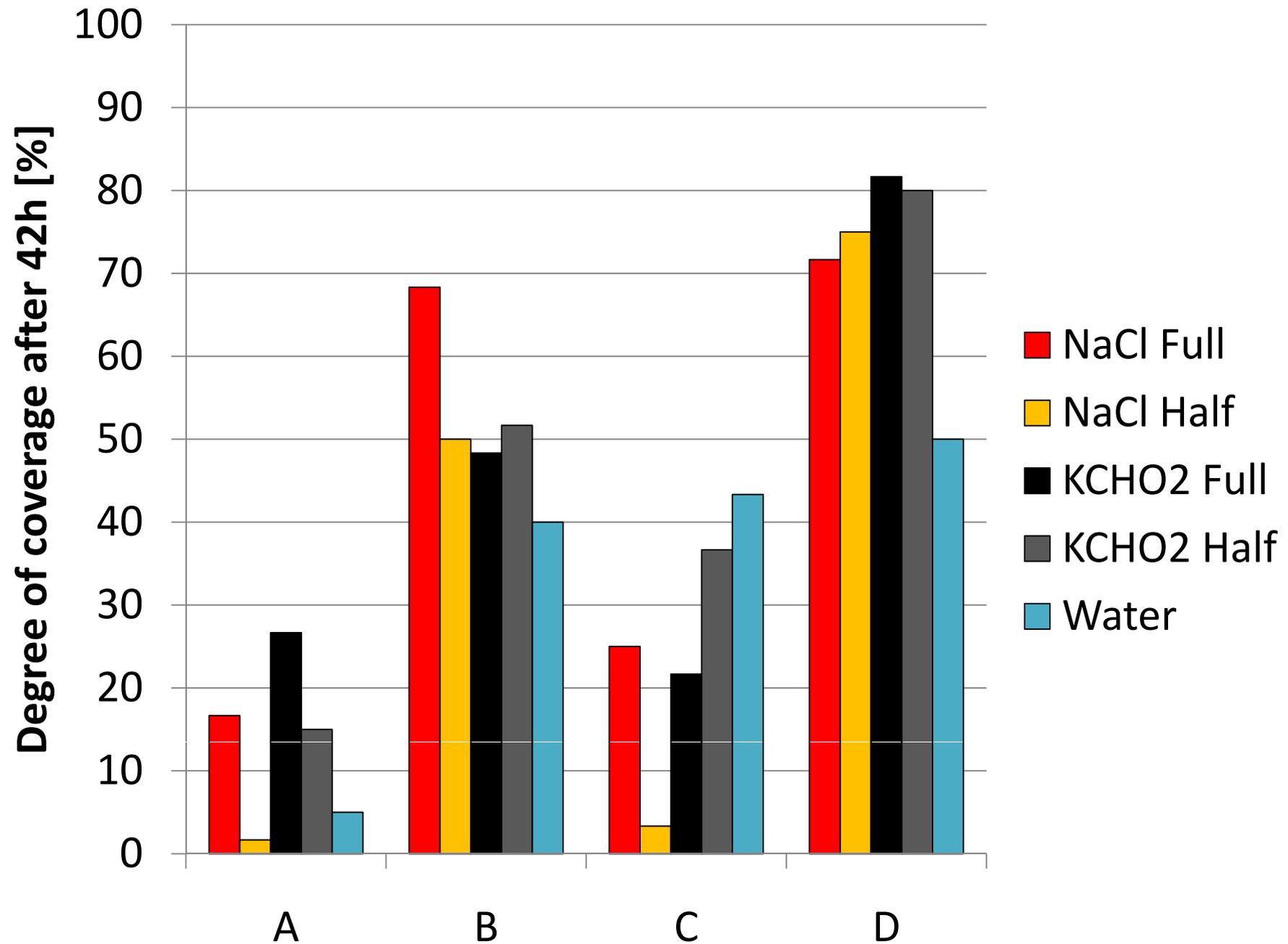




◆ A NaCl    ■ B NaCl    ▲ C NaCl    ● D NaCl  
◆ A KCHO2    ■ B KCHO2    ▲ C KCHO2    ● D KCHO2

EN 12697-11

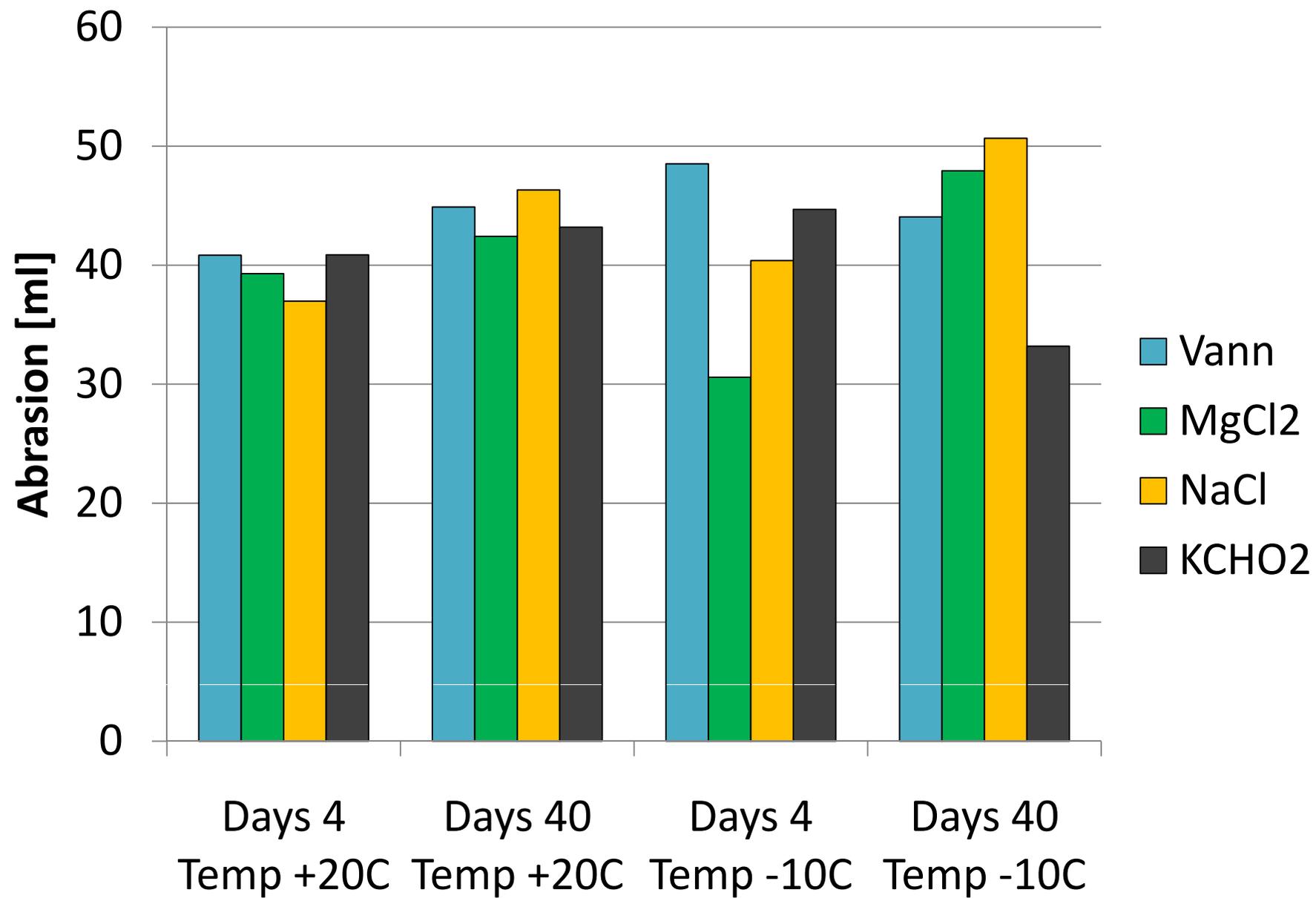






EN 12697-16





- Measuring distresses is not easy and outcome not always obvious
- Knowing the mechanism behind asphalt distresses is a major challenge
- More research is needed
  
- RAP (Remember (the) Asphalt Performance)

An aerial photograph of a coastal town built on a hillside overlooking a large bay. The water is a deep blue, and the sky is clear. In the distance, there are mountains and a small island. The town has white buildings and a prominent tower on a small peninsula. A sandy beach is visible in the foreground.

Tusen takk!

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