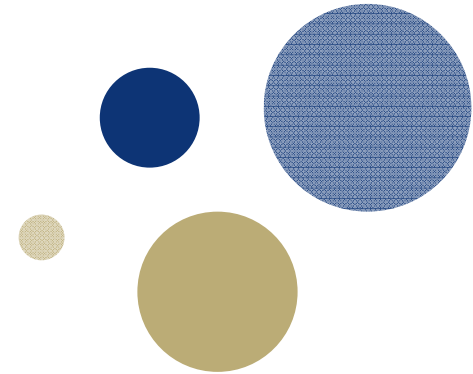




NTNU – Trondheim
Norwegian University of
Science and Technology



Bestandighet av asfalt

Asfaltdagen 2015

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miljøkrav

klimaeffekten

klimautfordringene

utslipp

klimagasser

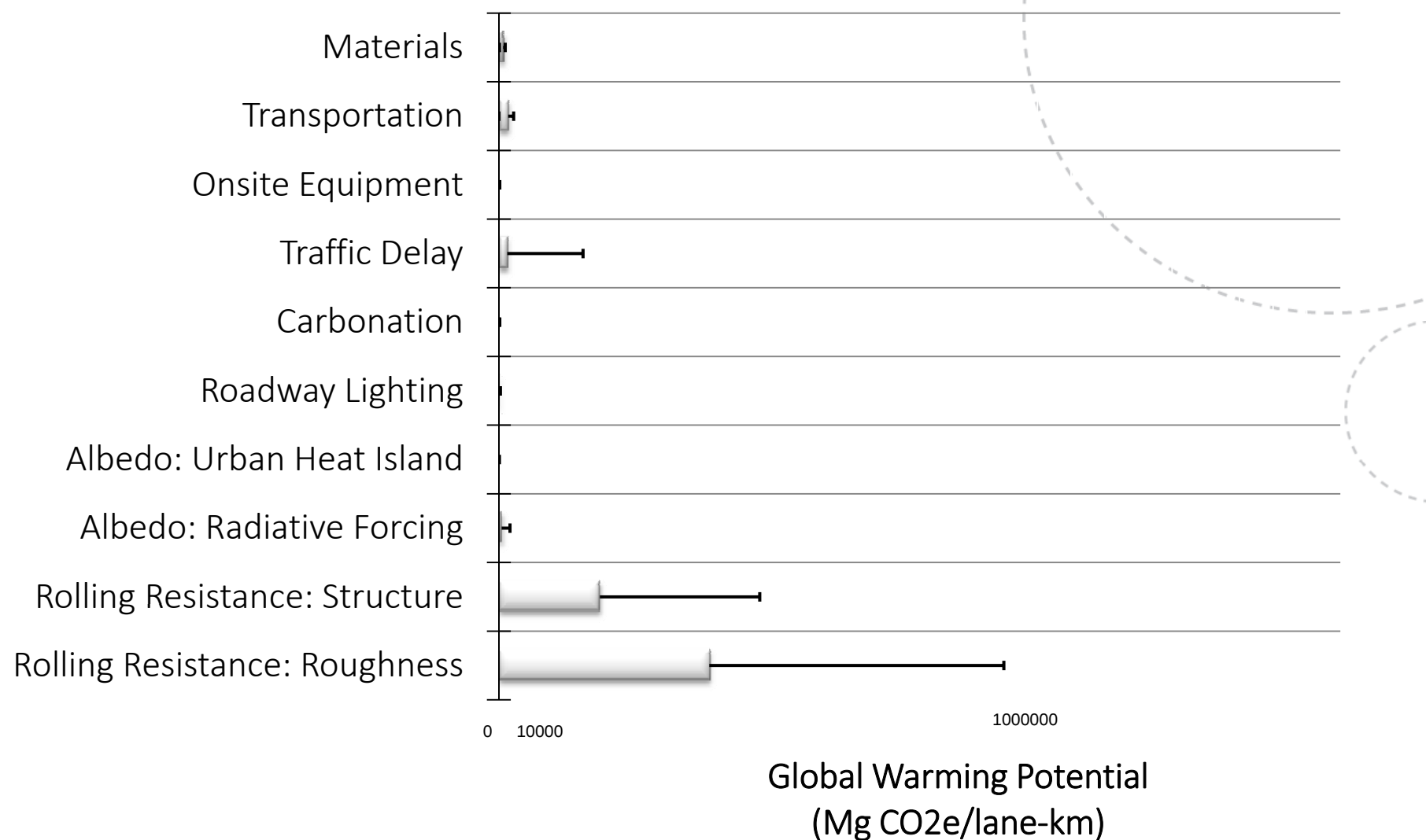
energibruk

CO₂

miljøpåvirkning

RAP^()!*

(*) 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

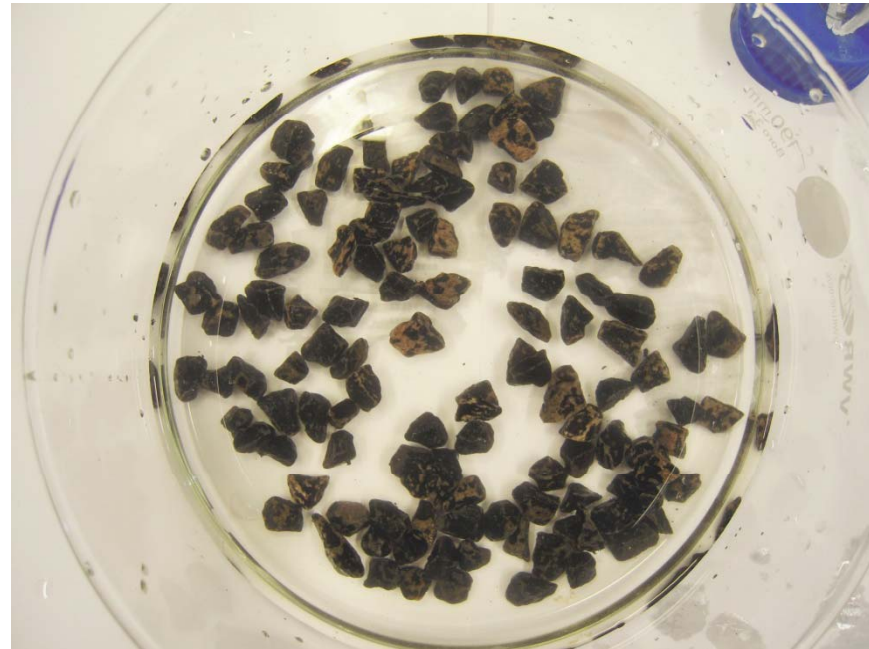
RAP^()!*

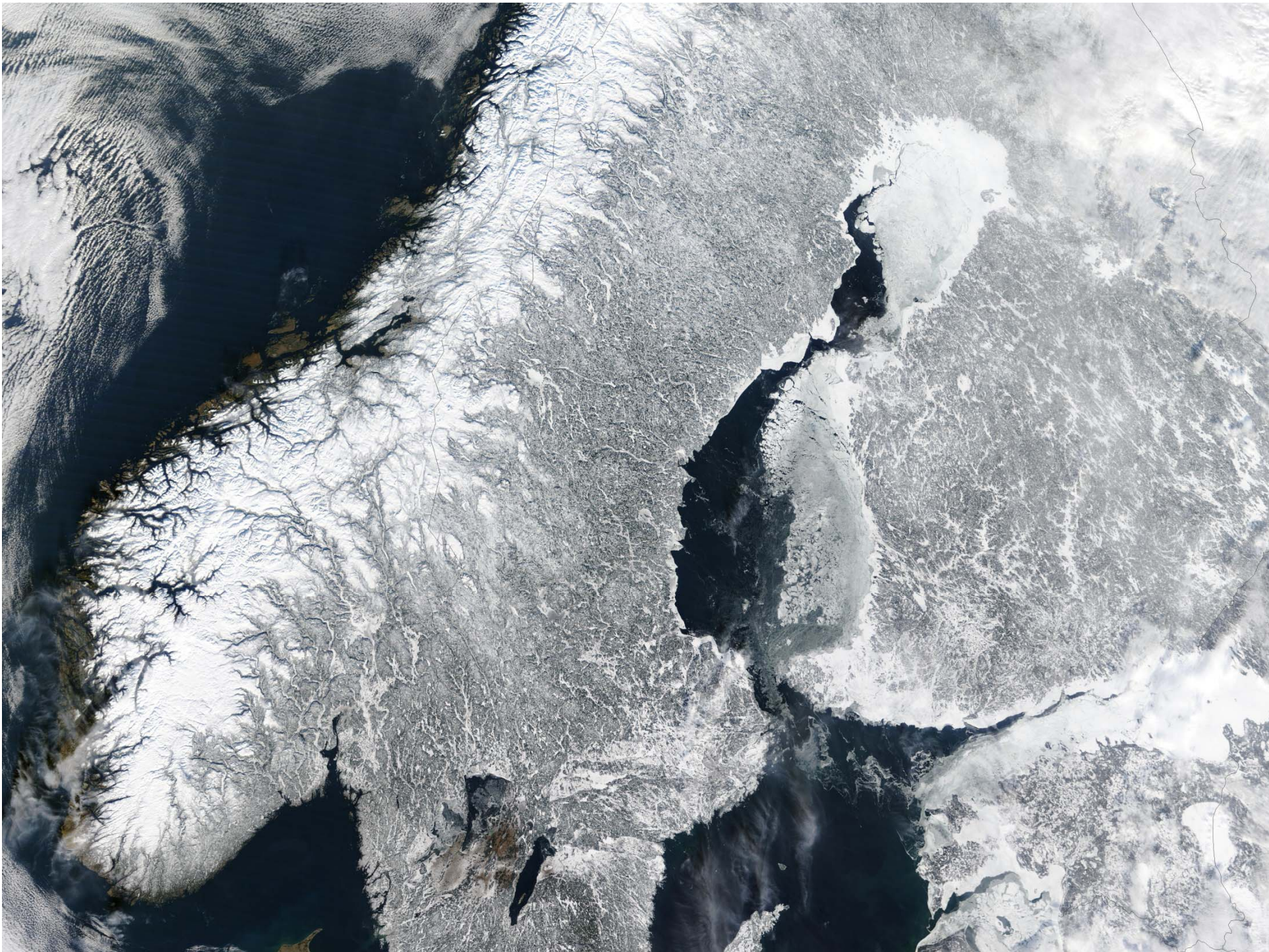
(*)Remember (the) Asphalt Performance

NABin 2014

Ny vedheftstest

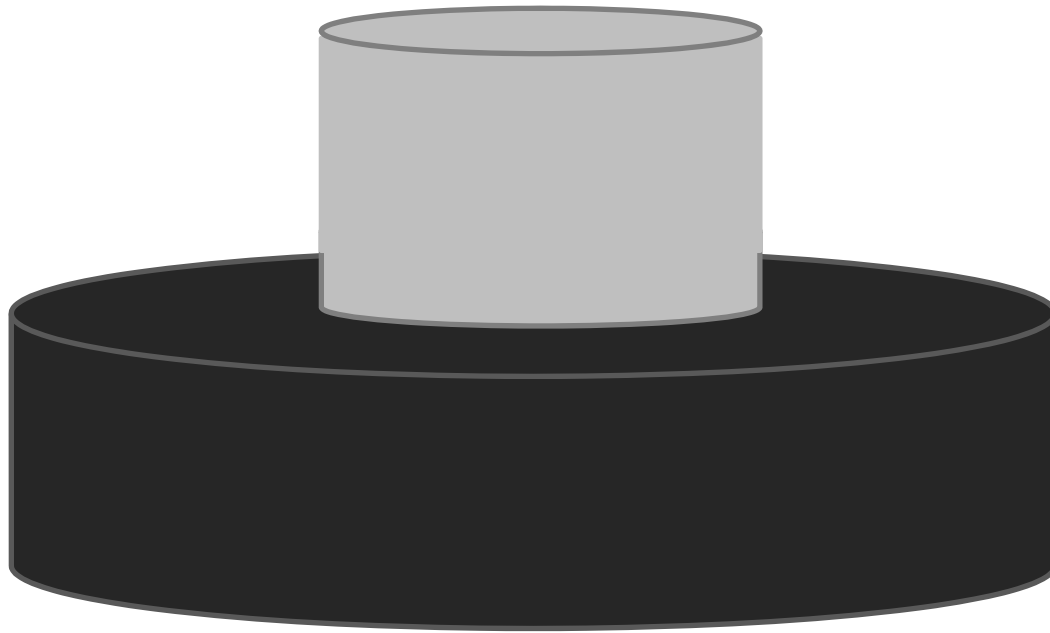
→ Sara Anastasio, NTNU







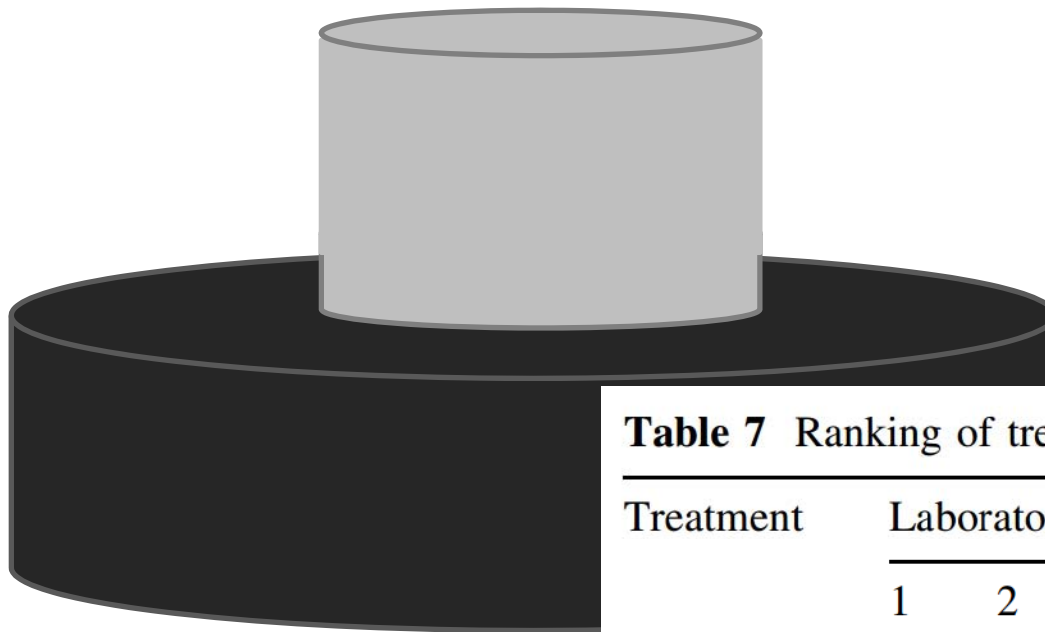
EN 12697-41



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

Jonas Ekblad, Ylva Edwards

Materials and Structures (2008) 41:1551–1562

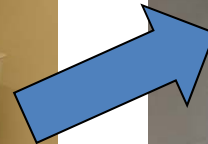
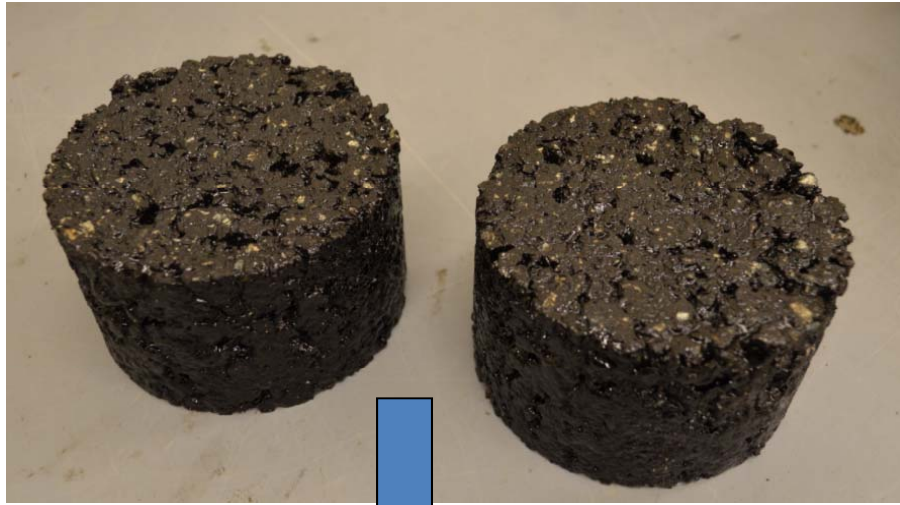
**Table 7** Ranking of treatments using fracture ratios

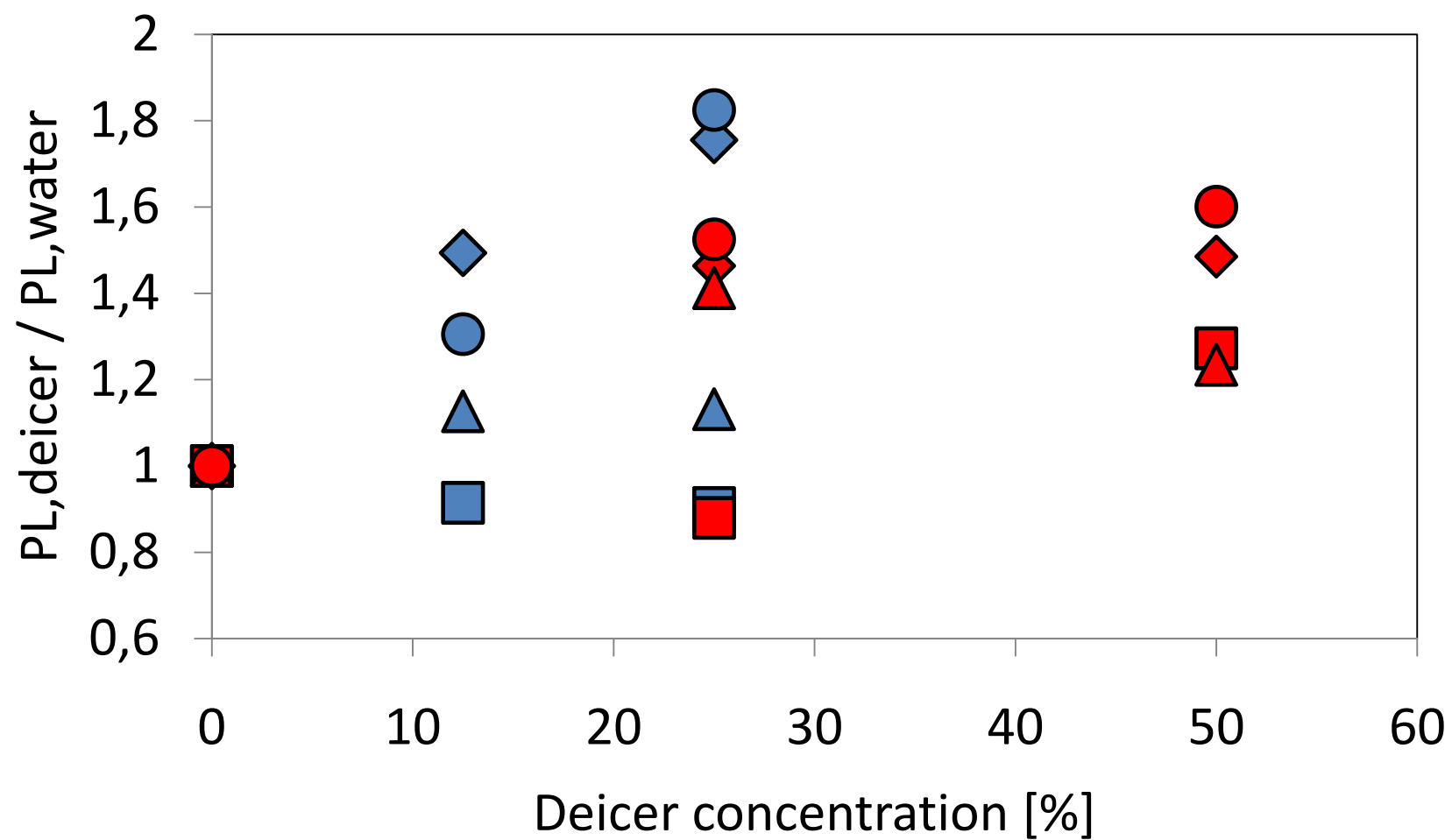
Treatment	Laboratory						Mean rank
	1	2	3	5	6	8	
KA	2	3	3	1	1	1	1.8
KF	1	1	2	2	2	2	1.7
MP1	3	2	1	3	3	3	2.5
NaFo	5	5	5	5	5	5	5.0
Water	4	4	4	4	4	4	4.0

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

Jonas Ekblad, Ylva Edwards

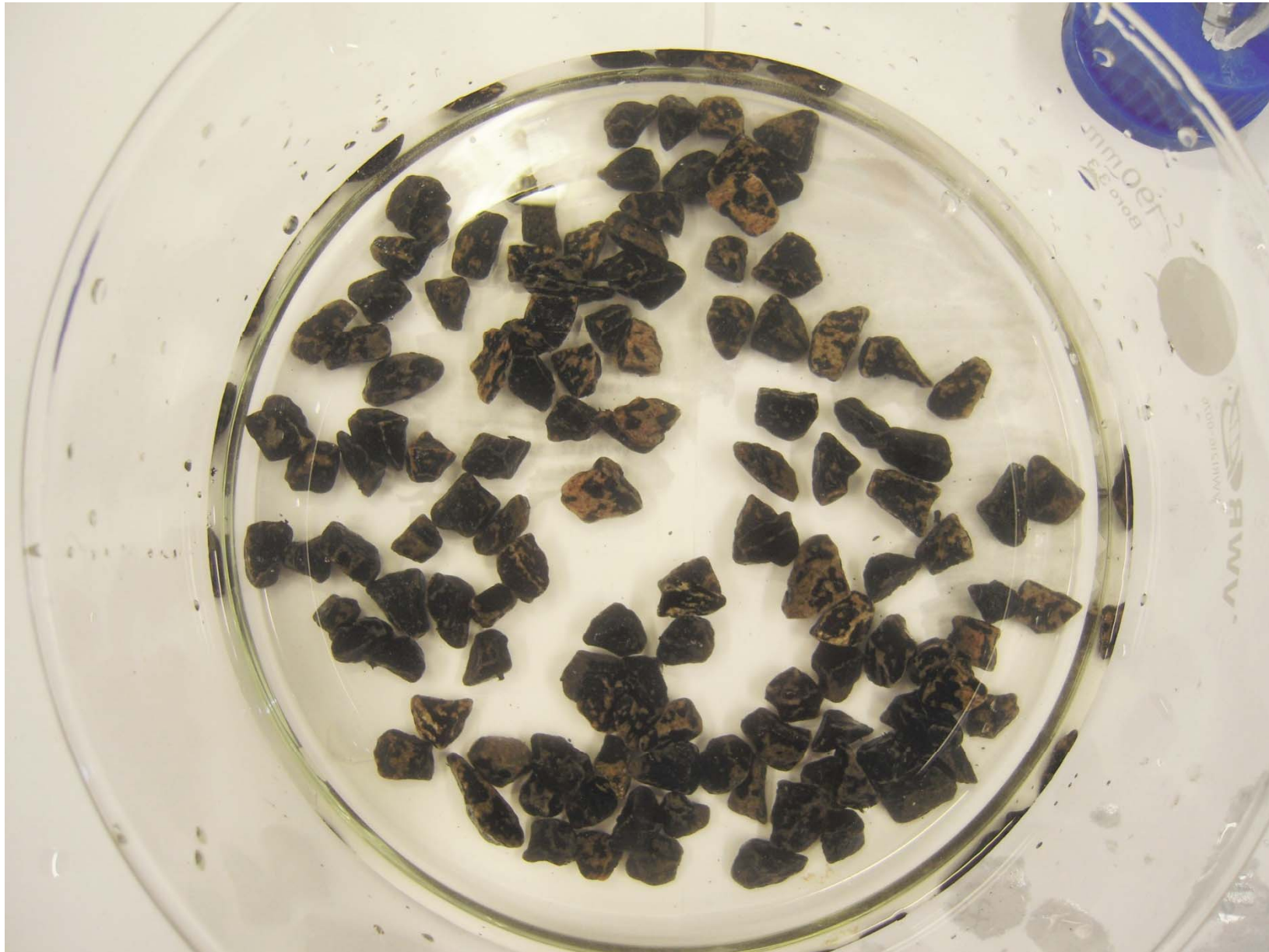
Materials and Structures (2008) 41:1551–1562

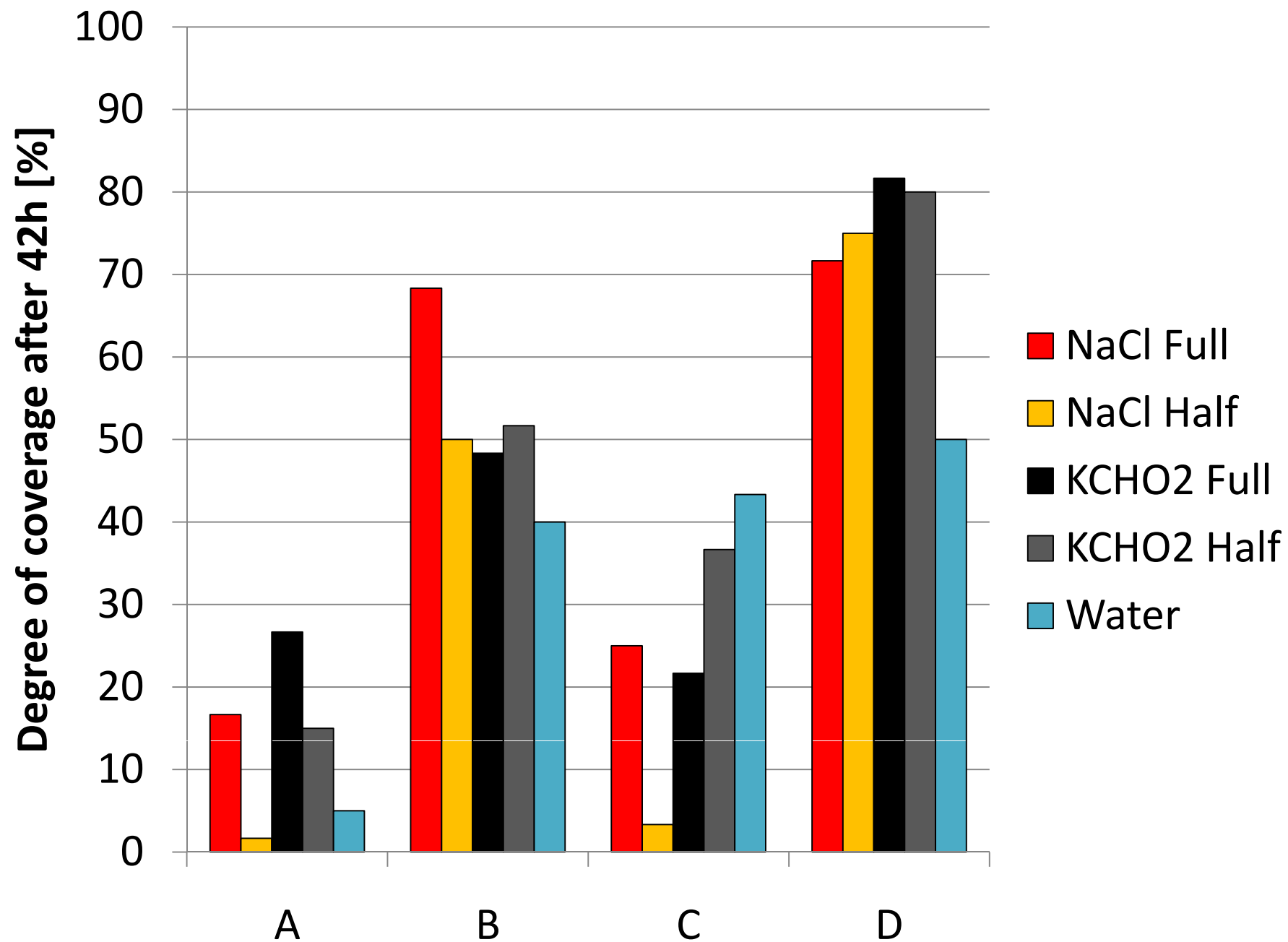




◆ A NaCl ■ B NaCl ▲ C NaCl ● D NaCl
◆ A KCHO₂ ■ B KCHO₂ ▲ C KCHO₂ ● D KCHO₂

EN 12697-11

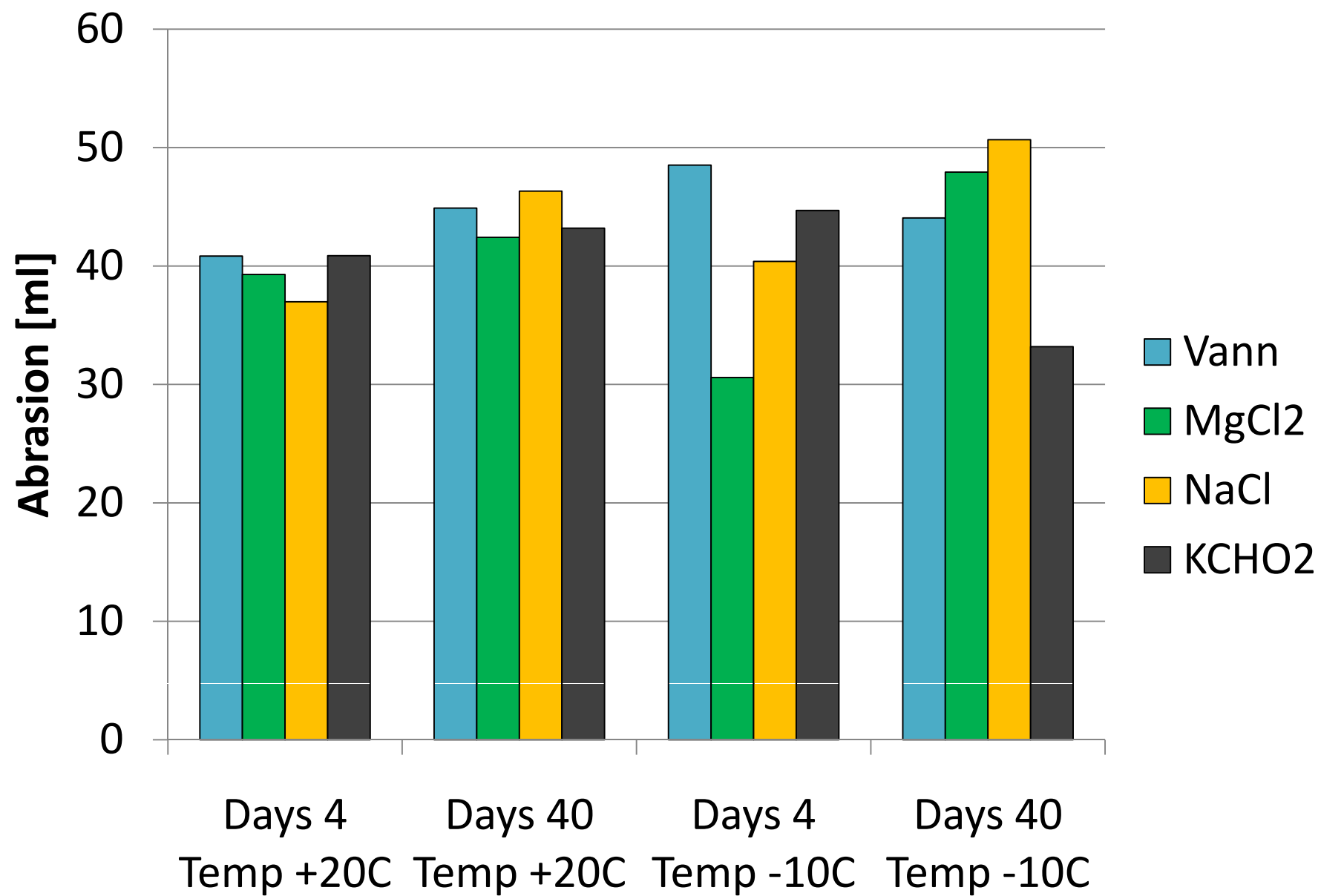






EN 12697-16





- 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)



Tusen takk!

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