

NEUBURG SILICEOUS EARTH IN COIL COATING TOP COAT, WHITE, HIGH GLOSS POLYESTER-BASED

OBJECTIVE

How can Sillitin Z 89 and Aktifit AM Reduce Titanium Dioxide?

Substitution of
20 % titanium dioxide



Neuburg Siliceous Earth:
Sillitin Z 89
Aktifit AM

FORMULATION

	Control *	Substitution of 20 % titanium dioxide	
		by equal volume	by equal weight
Dynapol LH 538-02	43.2	43.2	43.2
Aerosil 200	0.2	0.2	0.2
Titanium dioxide	28.1	22.5	22.5
Neuburg Siliceous Earth	-	3.7	5.6
Solvesso 150	6.0	6.0	6.0
Cymel 303	7.0	7.0	7.0
Cymel 327	1.5	1.5	1.5
Nacure 2500	0.7	0.7	0.7
Resiflow FL 2	0.5	0.5	0.5
Byk 057	0.5	0.5	0.5
Butyldiglycol acetate	12.3	12.3	12.3
Total	100	98.1	100
PVC	17.5	17.5	19.1

* Base formulation by Evonik Degussa

HOFFMANN
MINERAL

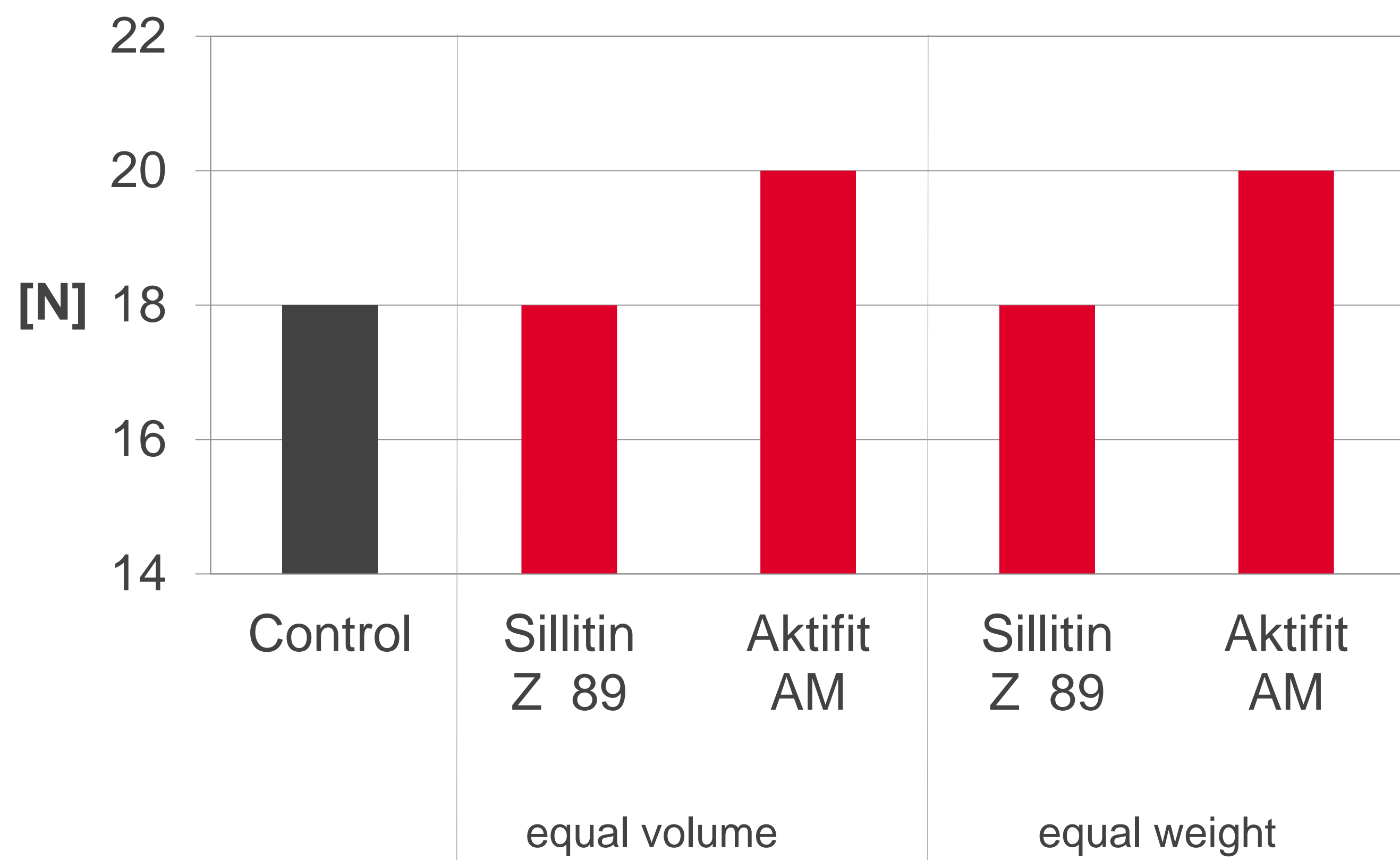
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Substrate: galvanized steel plates, thickness: 0.55 mm, pretreated chromate free,
Bonder 1303, with PU-standard primer 5 µm, dry film thickness: ~16 µm, PMT 241 °C

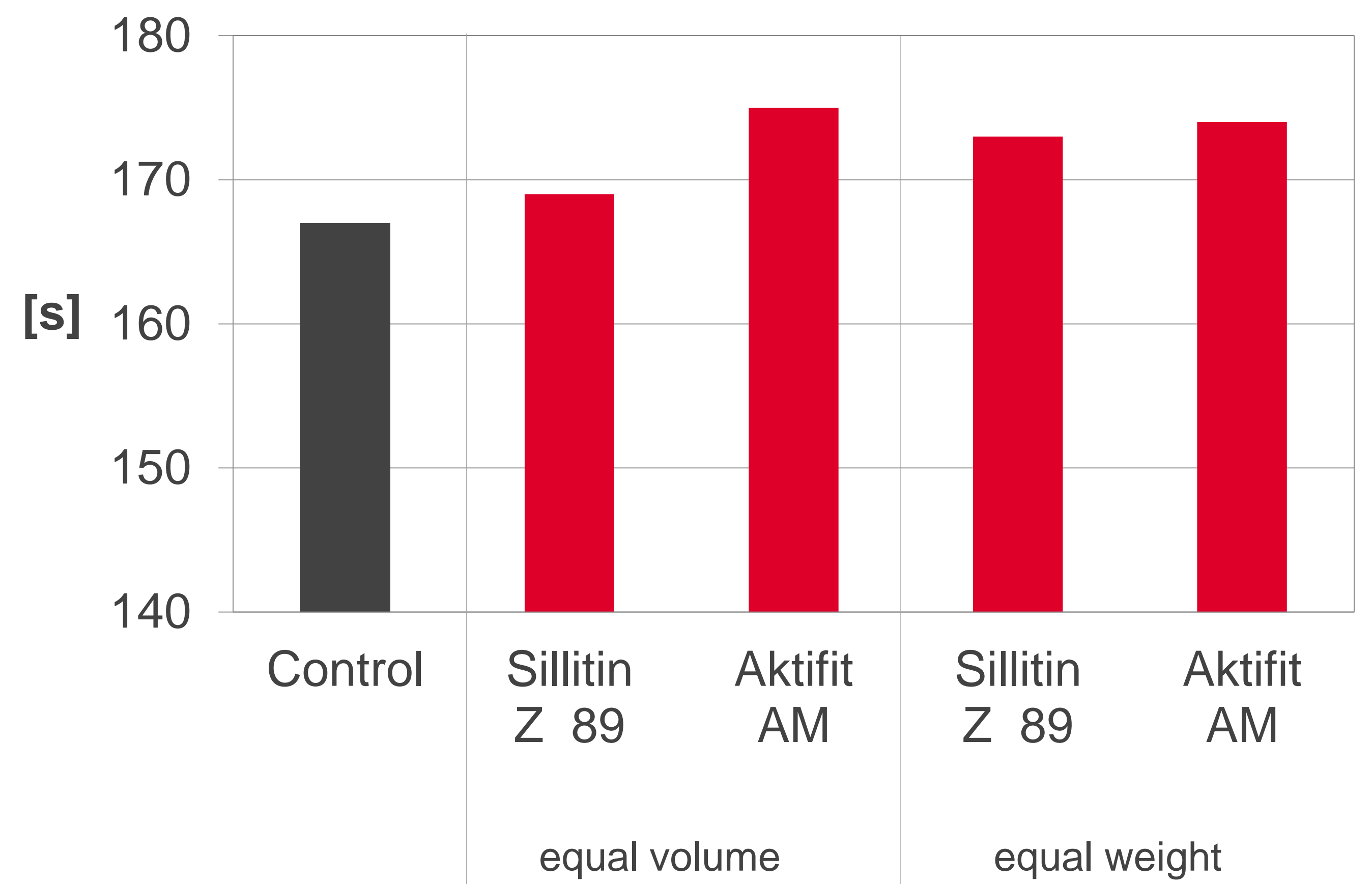
RESULTS

Mechanical Resistance

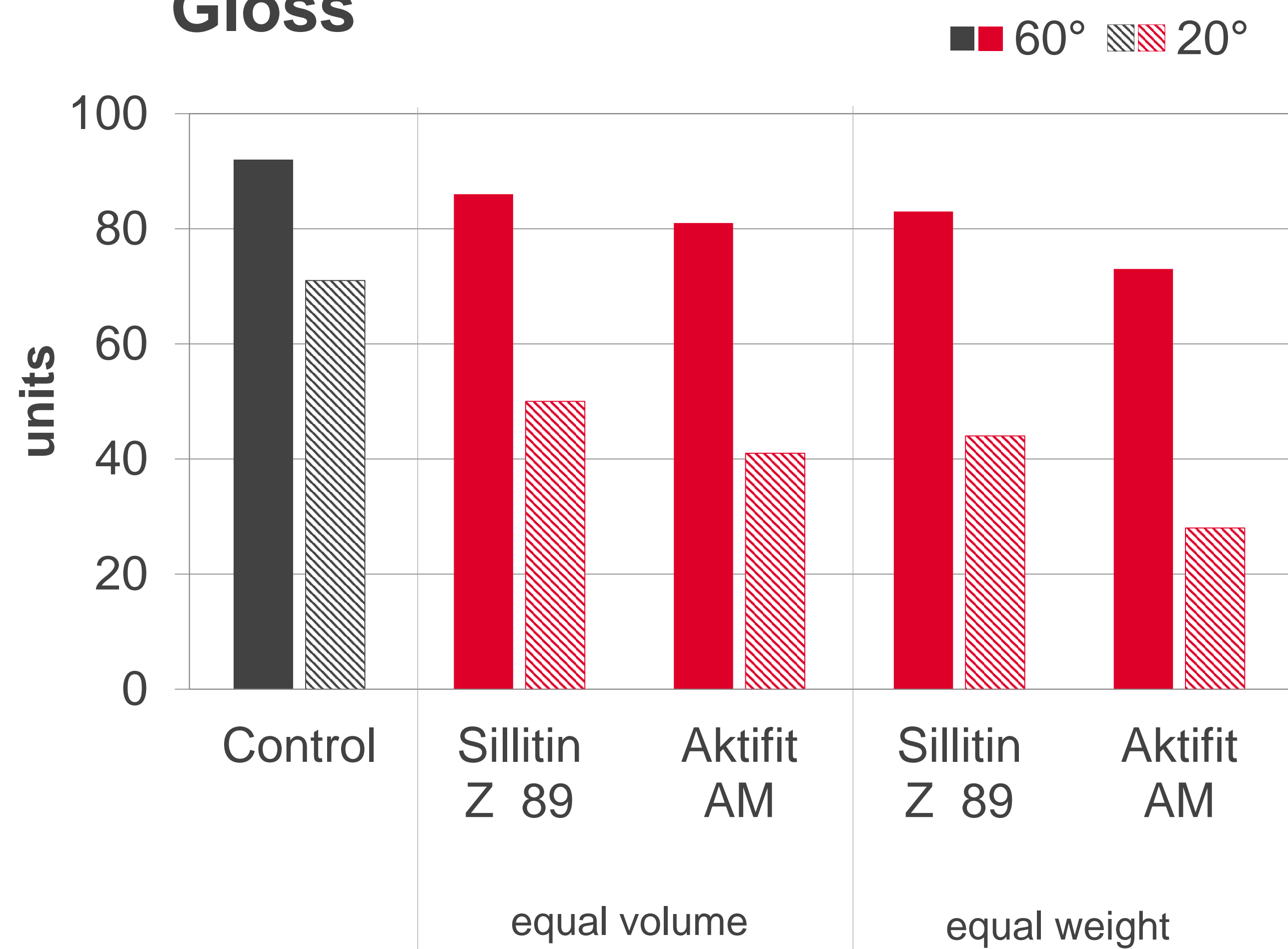
Force needed to scratch down to the substrate



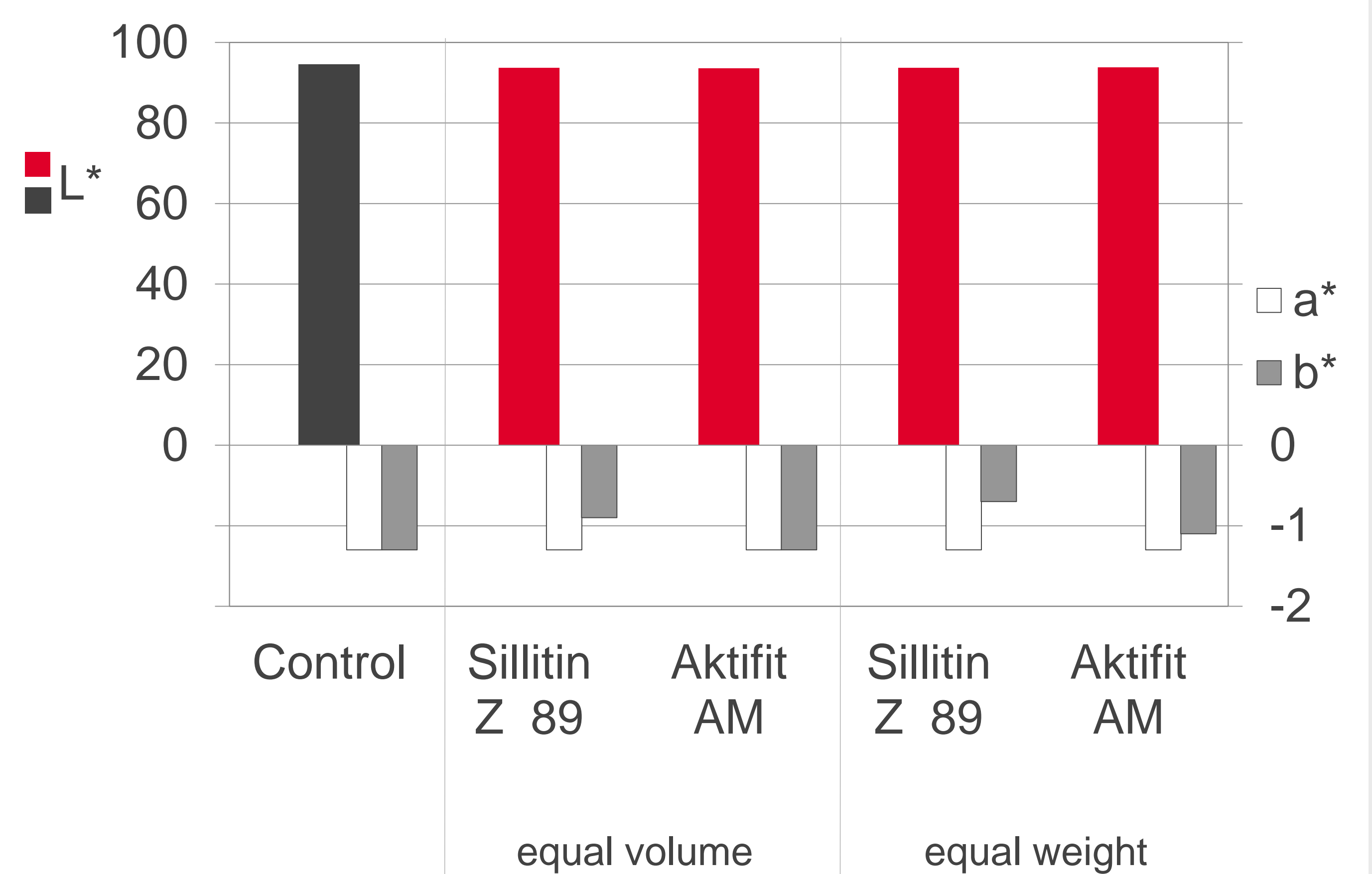
Hardness DIN EN ISO 1522



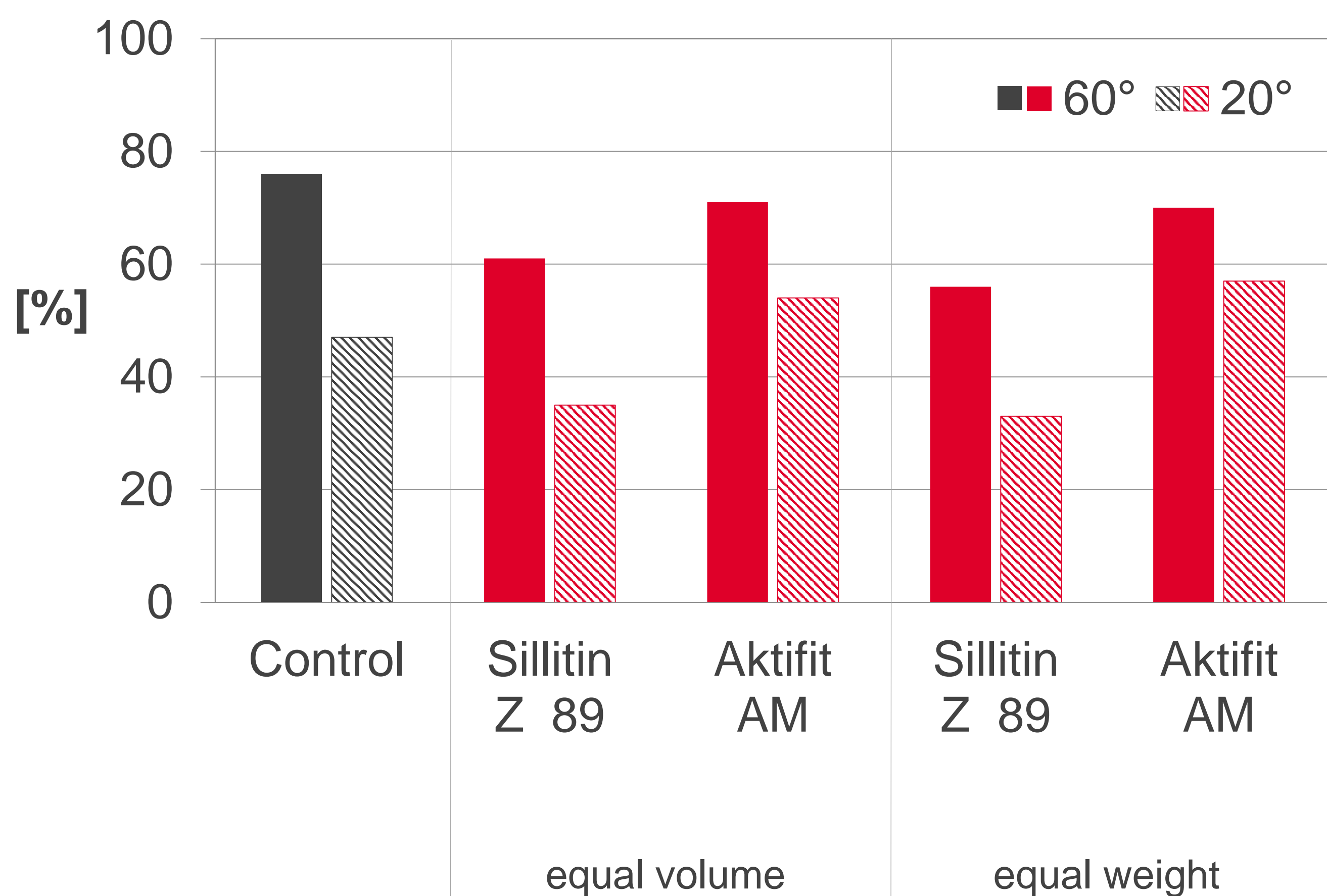
Gloss



Color



Remaining Gloss Percentage ASTM D 3794 (QUV-B 313 nm, 400h)



Cupping DIN EN ISO 1520

