

EMEP – 32nd intercomparison of analytical methods

Laboratory 15, Norwegian Institute for Air Research NILU (Norway)

Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value [¥]	Expected value	Mean value	Standard deviation	Z score	EMEP quality norm [¤]
A2	SO ₂	0.209	0.22	0.194	0.037	0.404	S
A3	SO ₂	0.087	0.1	0.108	0.048	-0.436	Q
A4	SO ₂	0.596	0.6	0.511	0.104	0.819	S
A5	SO ₂	0.535	0.54	0.512	0.12	0.191	S

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Please check the EMEP intercalibration website for more statistics, Youden plots, updated expected values ect: <http://www.nilu.no/projects/ccc/intercomparison.html>

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EMEP – 32nd intercomparison of analytical methods

Laboratory 19, Centro Nacional de Sanidad Ambiental (Spain)

Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value [¥]	Expected value	Mean value	Standard deviation	Z score	EMEP quality norm [¤]
A2	SO ₂	0.18	0.22	0.195	0.036	-0.41	Q
A3	SO ₂	0.06	0.1	0.107	0.046	-1.009	U
A4	SO ₂	0.58	0.6	0.517	0.102	0.618	S
A5	SO ₂	0.53	0.54	0.513	0.115	0.144	S

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EMEP – 32nd intercomparison of analytical methods

Laboratory 20, Swedish Environmental Research Institute IVL, Gothenburg (Sweden)

Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value [¥]	Expected value	Mean value	Standard deviation	Z score	EMEP quality norm [¤]
A2	SO ₂	0.203	0.22	0.195	0.036	0.247	S
A3	SO ₂	0.091	0.1	0.107	0.046	-0.33	S
A4	SO ₂	0.594	0.6	0.517	0.102	0.75	S
A5	SO ₂	0.53	0.54	0.513	0.115	0.148	S

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EMEP – 32nd intercomparison of analytical methods

Laboratory 34, Ministry of Environment and Urbanisation (Turkey)

Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value [¥]	Expected value	Mean value	Standard deviation	Z score	EMEP quality norm [¤]
A2	SO ₂	0.093	0.22	0.194	0.037	-2.721	U
A3	SO ₂	0.038	0.1	0.108	0.048	-1.45	U
A4	SO ₂	0.281	0.6	0.511	0.104	-2.204	U
A5	SO ₂	0.247	0.54	0.512	0.12	-2.209	U

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Laboratory 36, Hydrometeorological Institute of Slovenia (Slovenia)

Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value [¥]	Expected value	Mean value	Standard deviation	Z score	EMEP quality norm [¤]
A2	SO ₂	0.248	0.22	0.194	0.037	1.454	Q
A3	SO ₂	0.122	0.1	0.108	0.048	0.293	U
A4	SO ₂	0.641	0.6	0.511	0.104	1.251	S
A5	SO ₂	0.59	0.54	0.512	0.12	0.65	S

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EMEP – 32nd intercomparison of analytical methods

Laboratory 173, Company Petrokemija d.d. (Croatia)

Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value [¥]	Expected value	Mean value	Standard deviation	Z score	EMEP quality norm [¤]
A2	SO ₂	0.16	0.22	0.194	0.037	-0.915	U
A3	SO ₂	0.23	0.1	0.108	0.048	2.542	U
A4	SO ₂	0.58	0.6	0.511	0.104	0.665	S
A5	SO ₂	0.69	0.54	0.512	0.12	1.484	U

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Laboratory 178, Environmental Chemistry and EANET Monitoring Laboratory,Limnological Institute RAS/SB, Irkutsk (Russian Federation)

Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value [¥]	Expected value	Mean value	Standard deviation	Z score	EMEP quality norm [¤]
A2	SO ₂	0.215	0.22	0.194	0.037	0.565	S
A3	SO ₂	0.098	0.1	0.108	0.048	-0.207	S
A4	SO ₂	0.577	0.6	0.511	0.104	0.636	S
A5	SO ₂	0.516	0.54	0.512	0.12	0.033	S

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EMEP – 32nd intercomparison of analytical methods

Laboratory 182, Research Institute for Analytical Instrumentation, ICIA (Romania)

Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value [¥]	Expected value	Mean value	Standard deviation	Z score	EMEP quality norm [¤]
A2	SO ₂	5.918	0.22	0.194	0.037	154.077	U
A3	SO ₂	4.112	0.1	0.108	0.048	83.384	U
A4	SO ₂	10.095	0.6	0.511	0.104	92.074	U
A5	SO ₂	9.756	0.54	0.512	0.12	77.085	U

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EMEP – 32nd intercomparison of analytical methods

Laboratory 183, Public health institute Uzice (Republic of Serbia)

Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value [¥]	Expected value	Mean value	Standard deviation	Z score	EMEP quality norm [¤]
A2	SO ₂	0.198	0.22	0.194	0.037	0.094	Q
A3	SO ₂	0.081	0.1	0.108	0.048	-0.572	Q
A4	SO ₂	0.517	0.6	0.511	0.104	0.064	Q
A5	SO ₂	0.468	0.54	0.512	0.12	-0.372	Q

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EMEP – 32nd intercomparison of analytical methods

Laboratory 184, Institute for Public Health Pozarevac (Republic of Serbia)

Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value [¥]	Expected value	Mean value	Standard deviation	Z score	EMEP quality norm [¤]
A2	SO ₂	0.185	0.22	0.194	0.037	-0.229	Q
A3	SO ₂	0.101	0.1	0.108	0.048	-0.155	S
A4	SO ₂	0.551	0.6	0.511	0.104	0.391	S
A5	SO ₂	0.483	0.54	0.512	0.12	-0.238	Q

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Laboratory 188, Institute of Public Health - Krusevac (Republic of Serbia)

Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value [¥]	Expected value	Mean value	Standard deviation	Z score	EMEP quality norm [¤]
A2	SO ₂	0.198	0.22	0.194	0.037	0.108	S
A3	SO ₂	0.088	0.1	0.108	0.048	-0.415	Q
A4	SO ₂	0.518	0.6	0.511	0.104	0.069	Q
A5	SO ₂	0.466	0.54	0.512	0.12	-0.384	Q

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EMEP – 32nd intercomparison of analytical methods

Laboratory 189, Institute of Public Health - Kikinda (Republic of Serbia)

Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value [¥]	Expected value	Mean value	Standard deviation	Z score	EMEP quality norm [¤]
A2	SO ₂	0.199	0.22	0.194	0.037	0.135	S
A3	SO ₂	0.107	0.1	0.108	0.048	-0.02	S
A4	SO ₂	0.513	0.6	0.511	0.104	0.021	Q
A5	SO ₂	0.462	0.54	0.512	0.12	-0.418	Q

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Laboratory 190, Institute for occupational safety and preventive engineering - Novi Sad (Republic of Serbia)

Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value [¥]	Expected value	Mean value	Standard deviation	Z score	EMEP quality norm [¤]
A2	SO ₂	0.202	0.22	0.194	0.037	0.216	S
A3	SO ₂	0.127	0.1	0.108	0.048	0.397	U
A4	SO ₂	0.535	0.6	0.511	0.104	0.232	Q
A5	SO ₂	0.465	0.54	0.512	0.12	-0.393	Q

¥ Reported values are blank corrected, unless you informed us that this has already been done.

Corrections are done by subtracting the blank value when a value was reported, or 1/2 MDL when MDL was reported.

¤ EMEP quality norm; the letters in the column indicates:

S – Satisfactory: Your result deviates less than ±10% of the expected value

Q – Questionable: Your result deviates between ±10-20% of the expected value

U – Unsatisfactory: Your result deviates more than ±20% of the expected value

B – Blank: You reported either no value or the detection limit

Please check the EMEP intercalibration website for more statistics, Youden plots, updated expected values ect: <http://www.nilu.no/projects/ccc/intercomparison.html>

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EMEP – 32nd intercomparison of analytical methods

Laboratory 193, Institute of Public Health of Vojvodina (Republic of Serbia)

Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value [¥]	Expected value	Mean value	Standard deviation	Z score	EMEP quality norm [¤]
A2	SO ₂	0.225	0.22	0.194	0.037	0.835	S
A3	SO ₂	0.165	0.1	0.108	0.048	1.188	U
A4	SO ₂	0.375	0.6	0.511	0.104	-1.305	U
A5	SO ₂	0.465	0.54	0.512	0.12	-0.393	Q

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EMEP – 32nd intercomparison of analytical methods

Laboratory 194, Institute of Public Health - Zrenjanin (Republic of Serbia)

Sulphur dioxide in absorbing solution (A-samples)

Sample name	Determinand	Reported value [¥]	Expected value	Mean value	Standard deviation	Z score	EMEP quality norm [¤]
A2	SO ₂	0.21	0.22	0.194	0.037	0.431	S
A3	SO ₂	0.1	0.1	0.108	0.048	-0.165	S
A4	SO ₂	0.375	0.6	0.511	0.104	-1.305	U
A5	SO ₂	0.74	0.54	0.512	0.12	1.901	U

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