



# GROUP REPORT

## Round 85

# ASBESTOS IN MATERIALS SCHEME (AIMS)

June 2025



This report is available to view on our website: <https://www.hsl.gov.uk/proficiency-testing-schemes/group-reports>

### ROUND 85 SAMPLE DETAILS

360 labs were assigned to Round 85 with 357 labs submitting complete results. All samples were prepared for circulation following our normal internal screening process and were scanned using stereozoom microscopy to assess homogeneity and suitability. Approximately 10% of all samples prepared were validated by 18 independent laboratories using either PLM or SEM analytical techniques.

The round consisted of four manufactured or commercial samples of materials that may contain asbestos and would typically be submitted for analysis at an asbestos testing laboratory:

Sample 1 was a commercial chrysotile string sample painted black. These materials were typically made with an asbestos content close to 100%.

Sample 2 was a manufactured, talc sample containing 0.3% tremolite asbestos.

Sample 3 was a manufactured non-asbestos paper sample made with organic fibres and containing added organic and plastic fibres.

Sample 4 was a manufactured cement sample containing 0.2% each of amosite and crocidolite asbestos.

The majority of errors in Round 85 occurred on Sample 2 where a number of labs failed to identify the tremolite present. The short tremolite fibres in this sample were finely spread throughout the talc.

Tremolite is a known contaminant of talc and analysts should be mindful of this when analysing mineral samples.

Within sample 2 electrostatic charge caused talc particles to adhere to the tremolite fibres meaning an extremely thorough look at the stereozoom stage was required. Careful analysis using tweezers to look at slightly larger particles should have revealed the tremolite fibres present. Pinch samples mounted in RI liquid should also have indicated the presence of asbestos fibres when using PLM.

Sample	Validation Number	Product Type	Target Component	Asbestos Present (%)	Other Added Fibres Present
1	361	String (Commercial)	Chrysotile	Unknown	None
2	362	Powder (Manufactured)	Tremolite	0.3%	None
3	363	Paper (Manufactured)	No Asbestos	N/A	Organic and plastic
4	364	Cement (Manufactured)	Amosite & Crocidolite	0.2% of each asbestos type	None



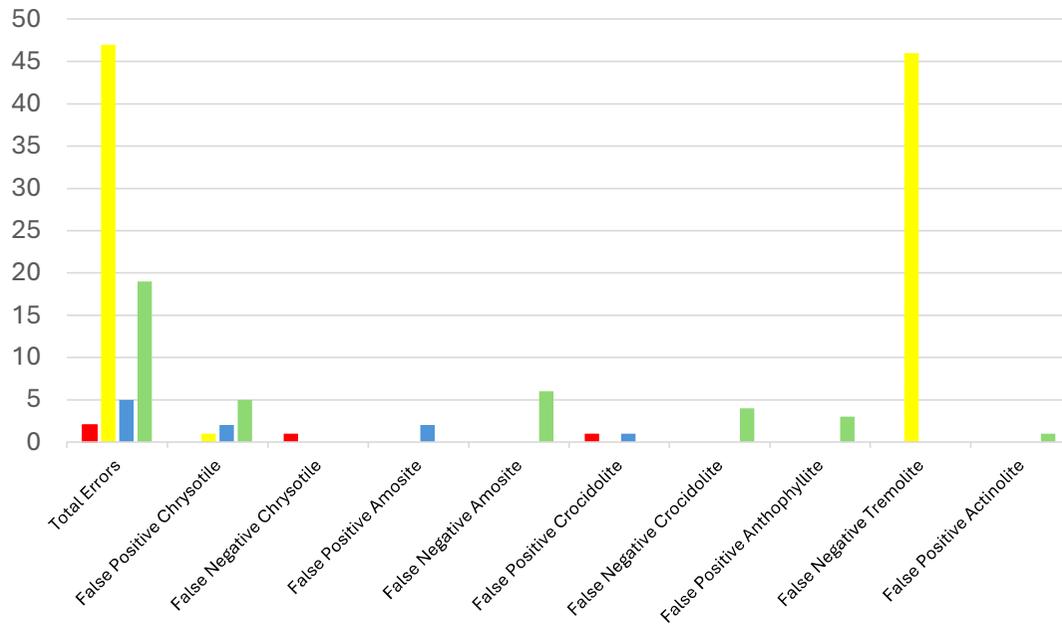


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**1. Type Of Errors Obtained**

**Chart 1 - AIMS Round 85 Errors**

■ Sample 1 ■ Sample 2 ■ Sample 3 ■ Sample 4



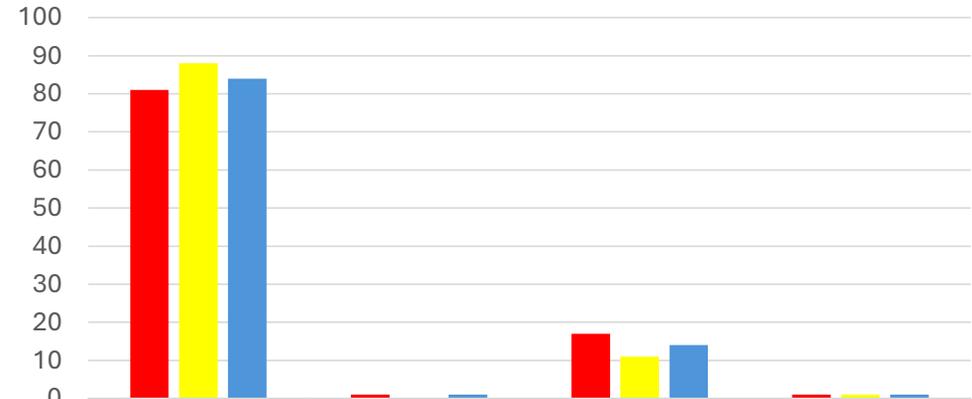
False Negative = Component has been missed. False Positive = Component has been incorrectly identified as present.

**2. Round Scores**

Chart 2 illustrates the distribution of scores for all participating laboratories. 301 (84%) laboratories obtained a score of zero in this round, indicating that these laboratories had not made any errors. The distribution of scores obtained by UK (United Kingdom) and Non-UK laboratories is also compared; 132 (88%) UK laboratories and 169 (81%) Non-UK laboratories obtained a score of zero for the round.

**Chart 2 - Distribution & Comparison of Errors AIMS Round 85**

■ Non UK % ■ UK % ■ Total %



	0 (No Errors)	7 (1 Minor Error)	8 - 32	> 32
Non UK %	81	1	17	1
UK %	88	0	11	1
Total %	84	1	14	1





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Chart 3 shows the percentage distribution of cumulative three round scores for all UK and Non-UK laboratories. 8 laboratories (2%) in total had not yet completed 3 rounds and therefore did not accumulate a score. Following this round :

- 277 laboratories (78%) obtained a good cumulative score (0 – 7 penalty points cumulatively).
- 59 laboratories (16%) obtained an acceptable cumulative score (8 – 32 penalty points cumulatively)
- 16 laboratories (4%) obtained an unsatisfactory cumulative score (33 or more penalty points cumulatively)

**Chart 3 - Distribution & Comparison of Cumulative Scores Following AIMS Round 85**

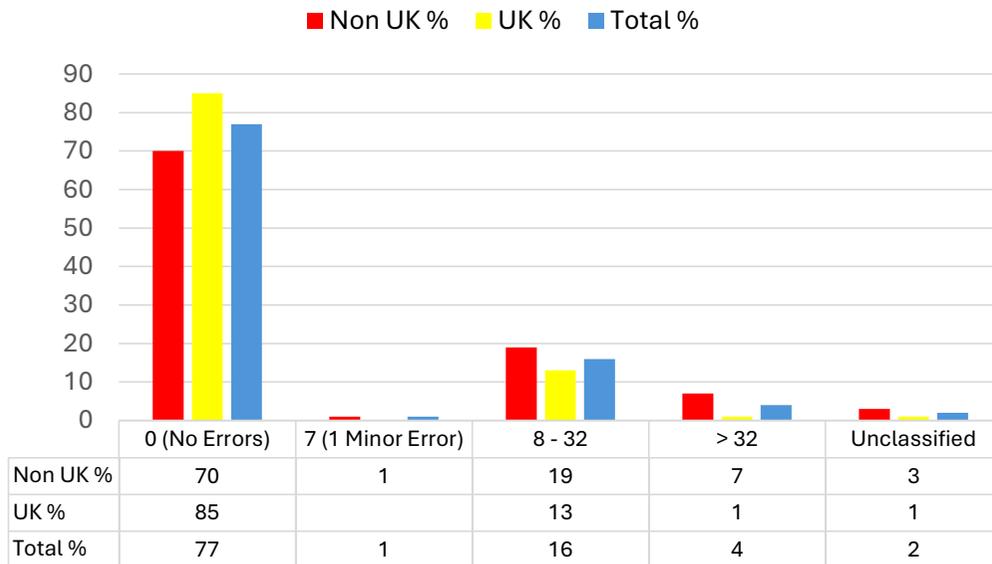
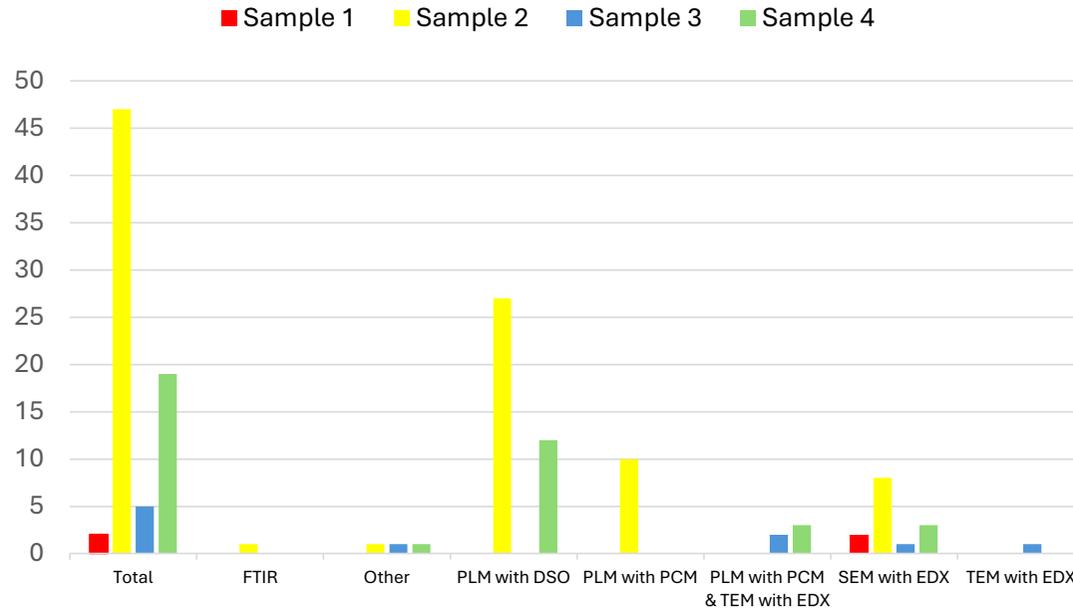


Chart 4 shows the number of errors made on each sample for all UK and Non-UK laboratories. FTIR – Fourier transform infrared spectroscopy. PLM - polarised light microscopy. DSO - dispersion staining objective. PCM - phase contrast microscopy, SEM - scanning electron microscopy. EDX - energy dispersive X-ray. TEM - transmission electron microscopy.

**Chart 4 - AIMS Round 85 Errors by Method**

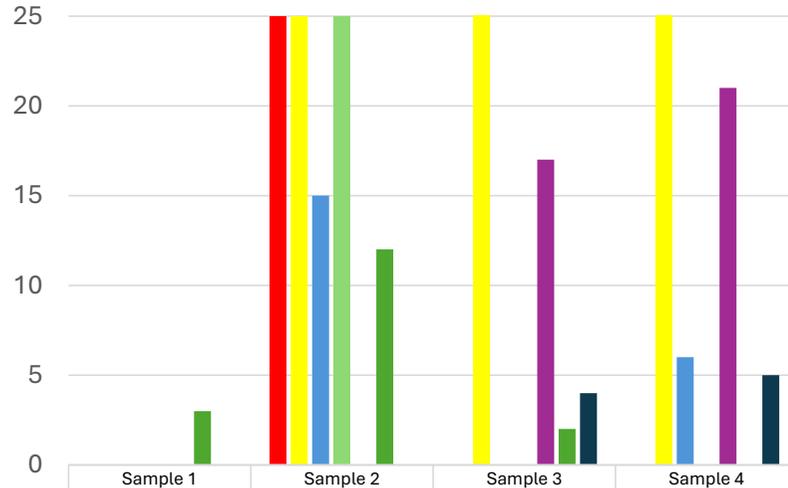




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Chart 5 shows the percentage of sample errors by method. Of the 357 participating labs in R85 the method used in terms of the number of labs was as follows : FTIR, 3 labs; PLM with DSO, 190 labs; PLM with PCM, 23 labs; SEM with EDX, 61 labs; TEM with EDX, 25 labs; PLM with DSO & TEM with EDX 13 labs; PLM with PCM & SEM with EDX, 12 labs; PLM with PCM & TEM with EDX, 27 labs and Other, 3 labs.

**Chart 5- Percentage of Errors by Sample Round 85**



Method	Sample 1	Sample 2	Sample 3	Sample 4
FTIR %		33		
Other %		25	33	33
PLM with DSO %		15		6
PLM with PCM %		45		
PLM with PCM & TEM with EDX %			17	21
SEM with EDX %	3	12	2	5
TEM with EDX %			4	5

**3. For Your Information - AIMS NEWS !!**

**Sample Investigations**

Following R84 there was one sample investigation. If you require a sample to be investigated by HSE please contact the team within 10 working days of the report being issued. Further details regarding sample investigations can be found in our Information Book for Participants, available in the Useful Links Section of our website page: [AIMS](#)

**Next Round**

AIMS R86 will be despatched by 25<sup>th</sup> August 2025 - please ensure we have the correct delivery information for your laboratory. You can check your contact information by logging on to the PT Online System ([HSE Proficiency Testing Schemes](#)) and clicking on 'Laboratory Details'. If you need to make any changes, please email the PT Team.

**Quality Control Samples**

We have a wide range of quality control samples available to purchase, including:

- additional rounds (PT038A) to help gain accreditation sooner
- replacement rounds (PT038R) to replace the latest round of AIMS
- past AIMS samples (PT040) for internal QC/ training
- water absorption samples (PT046)
- asbestos aggregate samples (PT047/8)

Further information is available on our website: [PT Quality Control Samples](#)

For enquiries, please contact the PT Team by email, quoting your HSE PT Lab Number.



5254

