



**Group Report**  
**Round 83**  
**October 2024**



Asbestos In Materials Scheme

# Asbestos In Materials (AIMS) Scheme

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

## Round 83 Sample Details

376 labs were assigned to Round 83 with 368 laboratories 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 samples of materials that may contain asbestos and would typically be submitted for analysis at an asbestos testing laboratory. Sample 1 was a manufactured cement/mortar sample containing 0.2% each of amosite, chrysotile and crocidolite asbestos; Sample 2 was a manufactured marble powder sample containing 0.2% anthophyllite asbestos; Sample 3 was a manufactured non-asbestos lagging sample made with talc and plaster and containing wollastonite and polypropylene fibres and Sample 4 was a manufactured non-asbestos plaster sample containing polypropylene and leather hide powder.

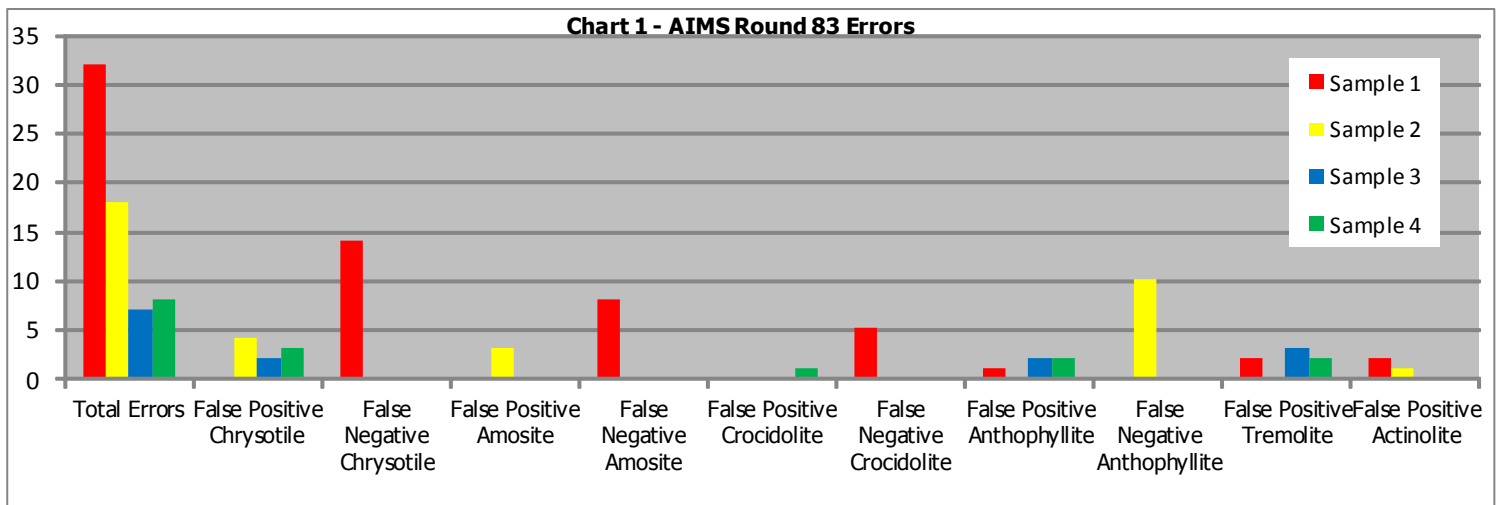
The majority of errors in Round 83 occurred on Sample 1 where a number of labs missed one or more of the three asbestos types present in the sample. Analysts should be aware that various asbestos products were produced containing up to 3 asbestos types often with differing quantities of asbestos. A thorough analysis of samples, including crushing or breaking this type of sample at the stereomicroscopy stage, is therefore required in order to identify all the asbestos types that may be present, some of which may be in smaller quantities than others.

Sample	Validation Number	Product Type	Target Component	Asbestos Present (%)	Other Added Fibres Present
1	353	Cement/ Mortar (Manufactured)	Amosite, Chrysotile, Crocidolite	0.2% for each asbestos type	None
2	354	Powder (Marble) (Manufactured)	Anthophyllite	0.2%	None
3	355	Lagging (Manufactured)	No Asbestos	N/A	Wollastonite and polypropylene
4	356	Plaster (Manufactured)	No Asbestos	N/A	Polypropylene and leather hide powder



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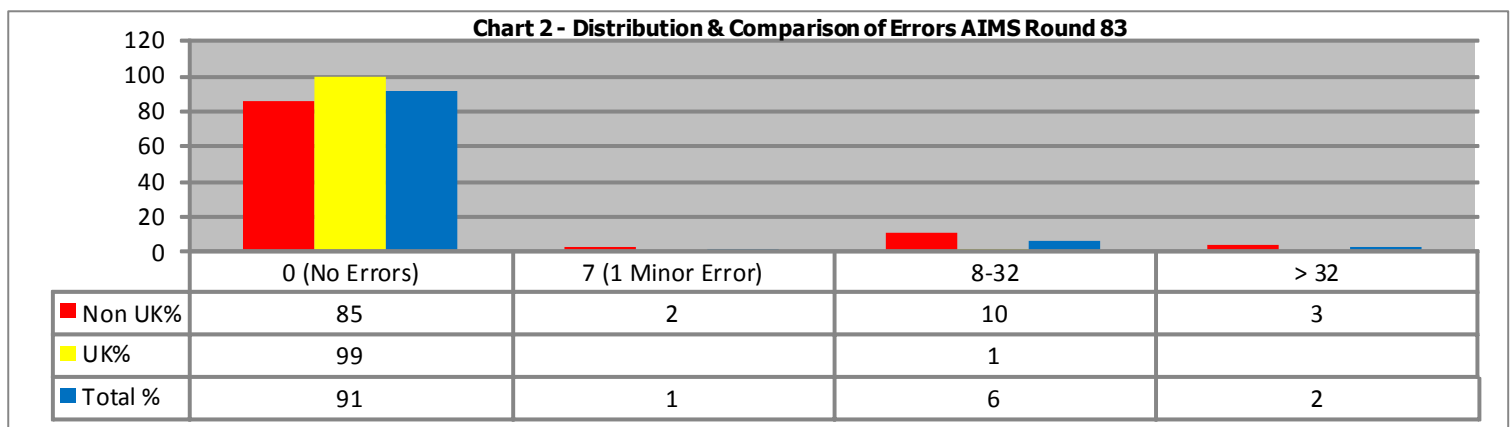
## 1. Type Of Errors Obtained



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. 335 (91%) 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; 152 (99%) UK laboratories and 183 (85%) Non-UK laboratories obtained a score of zero for the round.





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Chart 3 shows the percentage distribution of cumulative three round scores for all UK and Non-UK laboratories. 31 laboratories (8%) in total had not yet completed 3 rounds and therefore did not accumulate a score. Following this round, 276 laboratories (74%) obtained a good cumulative score (0 – 7 penalty points cumulatively). 52 laboratories (14%) obtained an acceptable cumulative score (8 – 32 penalty points cumulatively) and 17 laboratories (4%) obtained an unsatisfactory cumulative score (33 or more penalty points cumulatively).

**Chart 3 - Distribution & Comparison of Cumulative Scores Following AIMS Round 83**

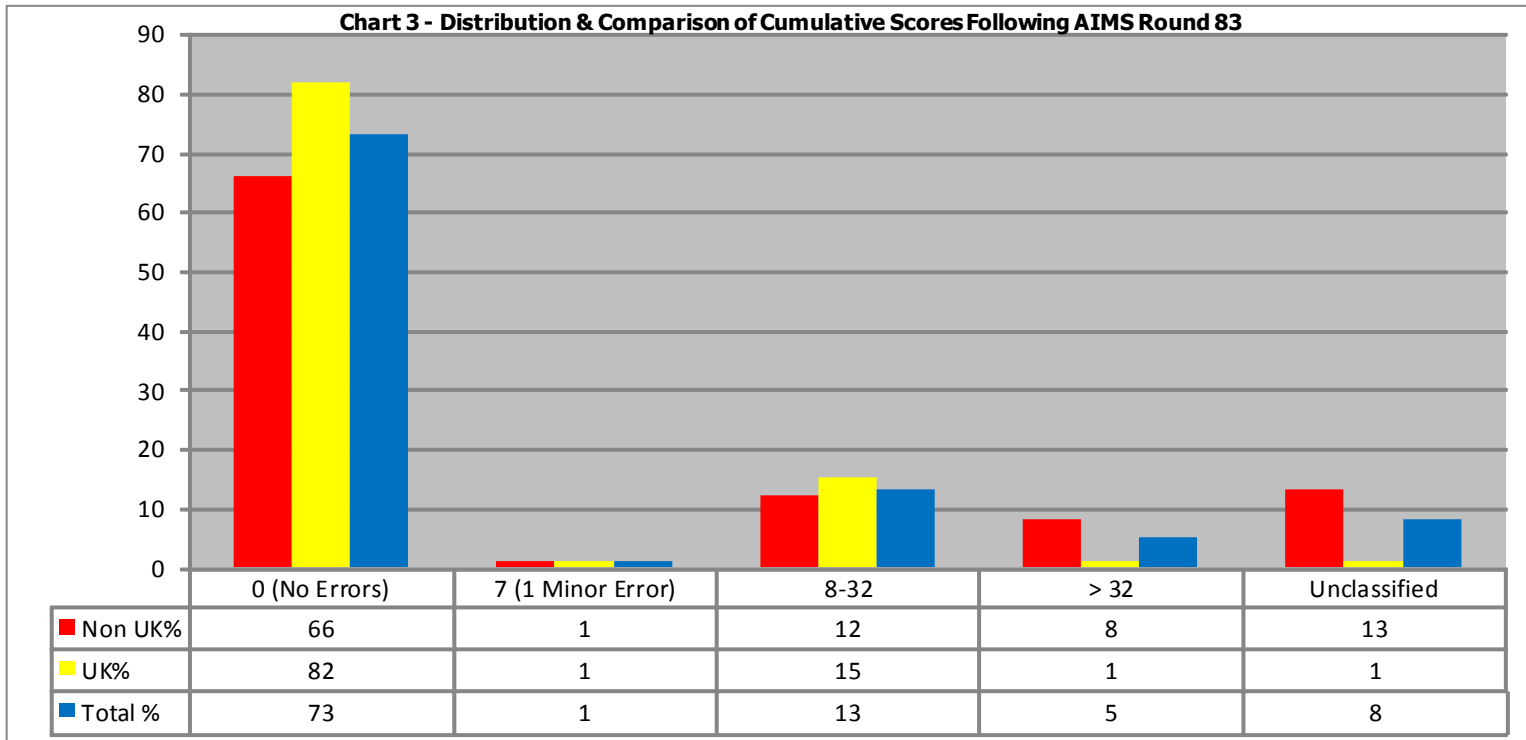
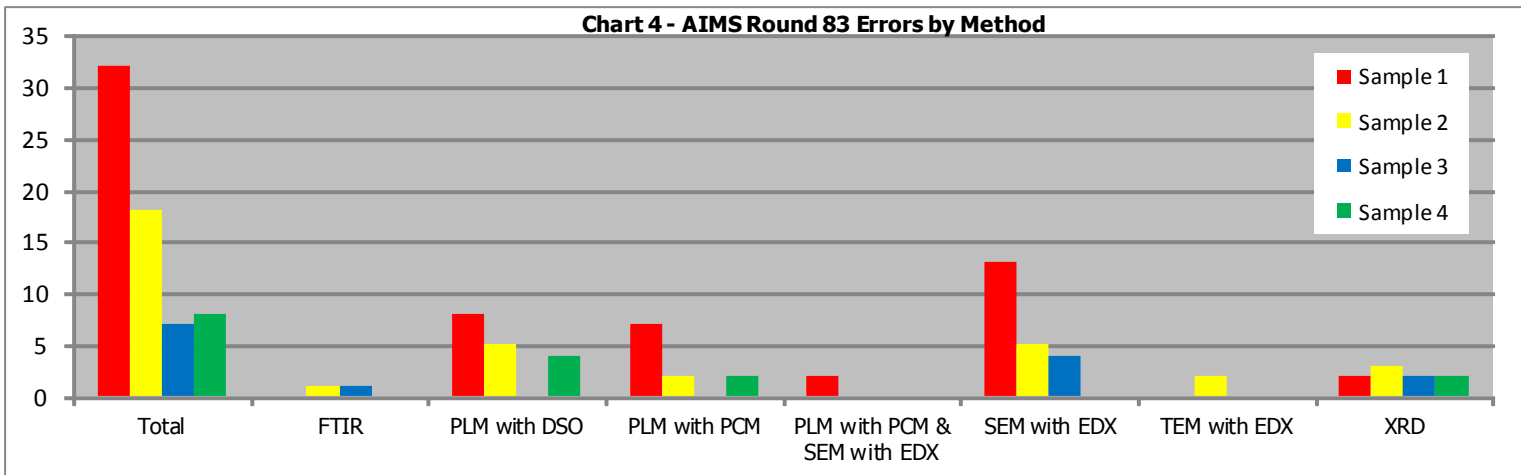


Chart 4 shows the number of errors made on each sample for all UK and Non-UK laboratories.

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. XRD - X-Ray diffraction.

**Chart 4 - AIMS Round 83 Errors by Method**





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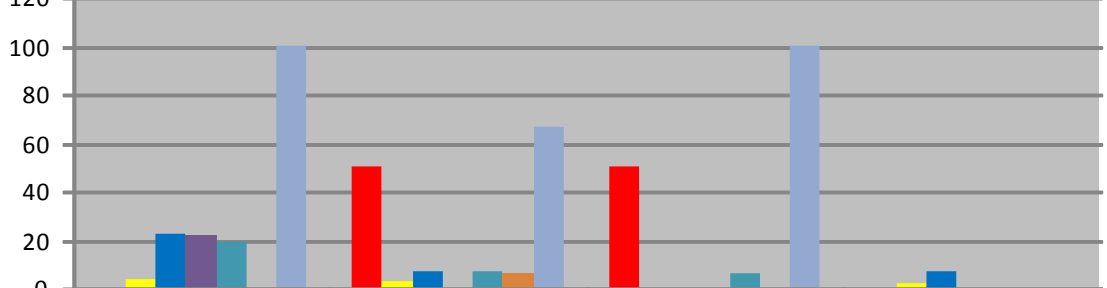
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Chart 5 shows the percentage of sample errors by method.

Of the 368 participating labs in R83 the method used in terms of the number of labs was as follows : FTIR, 2 labs; PLM with DSO, 186 labs; PLM with PCM, 31 labs; SEM with EDX, 69 labs; TEM with EDX, 28 labs; PLM with DSO & TEM with EDX 26 labs; PLM with PCM & SEM with EDX, 9 labs; PLM with PCM & TEM with EDX, 13 labs, XRD; 2 labs and Other, 2 labs.

**Chart 5- Percentage of Errors by Sample Round 83**



	Sample 1	Sample 2	Sample 3	Sample 4
■ FTIR %		50	50	
■ PLM with DSO %	4	3		2
■ PLM with PCM %	23	7		7
■ PLM with PCM & SEM with EDX %	22			
■ SEM with EDX %	19	7	6	
■ TEM with EDX %		6		
■ XRD %	100	67	100	

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

Following R82 there were no sample investigations. 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: <https://www.hsl.gov.uk/proficiency-testing-schemes/aims>

AIMS R84 will be despatched January 2025 - please ensure we have the correct delivery information. You can check what is on our records by logging on to the PT Online System and click on 'Laboratory Details'. If you need to make any changes, please email the PT Team.

Scheme subscriptions for 2025/ 26 will be available to purchase in January 2025 - a discounted price will be available for payments made by Worldpay (credit/ debit card).

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 and past AIMS samples (PT040) for internal QC/ training. Water absorption samples (PT046) and asbestos aggregate samples (PT047/8) are also available: <https://www.hsl.gov.uk/proficiency-testing-schemes/pt-quality-control-samples>



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