



**Group Report**  
**Round 79**  
**June 2023**



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 79 Sample Details

368 labs were assigned to Round 79 with 361 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 non-asbestos chalk sample containing viscose fibres; Sample 2 was a manufactured plaster sample containing 0.2% amosite asbestos and 0.2% anthophyllite asbestos; Sample 3 was a manufactured non-asbestos cement sample containing polypropylene fibres and Sample 4 was a manufactured painted plasterboard sample containing 0.4% crocidolite asbestos within the black textured paint layer.

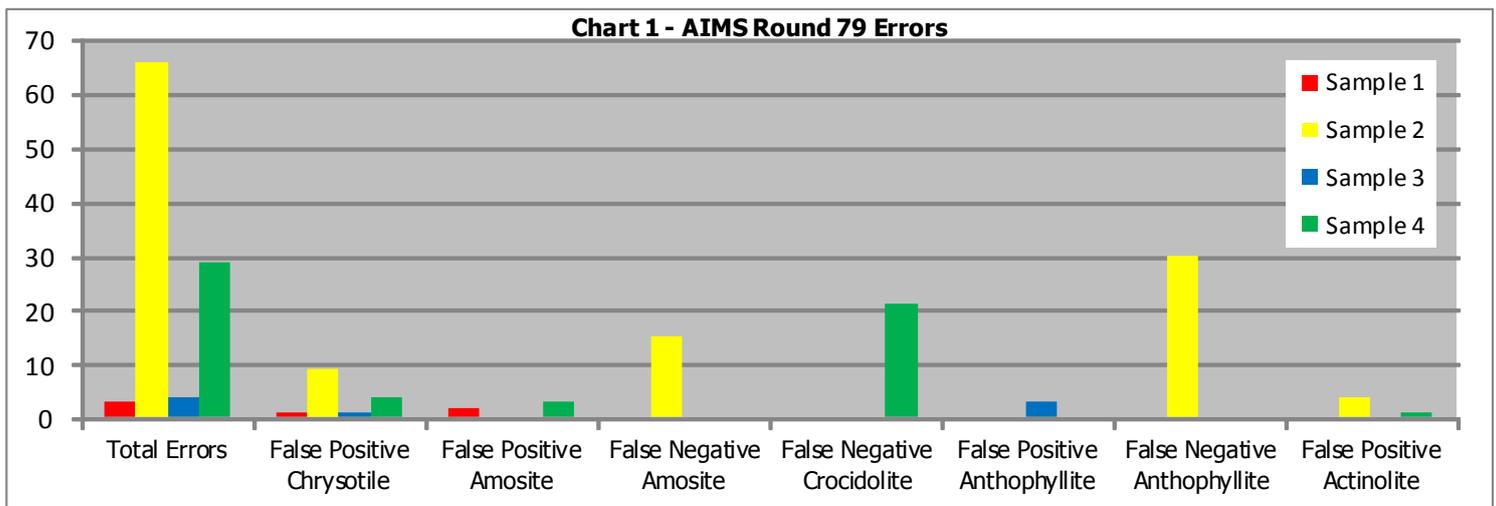
A number of errors occurred on Samples 2 and 4. The largest number of errors occurred on Sample 2 where a number of labs missed either the amosite or anthophyllite asbestos within the sample. All samples should be checked thoroughly for more than one asbestos type and analysts need to be aware that samples may contain up to three different asbestos types. The majority of errors that occurred on Sample 4 were analysts failing to identify the crocidolite asbestos within the paint layer. With this type of sample the outline of fibres can sometimes be seen in the paint layer at the stereozoom stage of analysis and then extracted carefully before the rest of the sample is analysed. Where obvious layers are present in a sample e.g. paint, plasterboard etc, then analysing each layer separately and carefully is recommended as this avoids contamination from other layers and can make the whole analytical process more straightforward.

Sample	Validation Number	Product Type	Target Component	Asbestos Present (%)	Other Added Fibres Present
1	337	Chalk (Manufactured)	No Asbestos	N/A	Viscose
2	338	Plaster (Manufactured)	Amosite & Anthophyllite	0.2% of each	None
3	339	Cement (Manufactured)	No Asbestos	N/A	Polypropylene
4	340	Painted Plasterboard (Manufactured)	Crocidolite	0.4%	None



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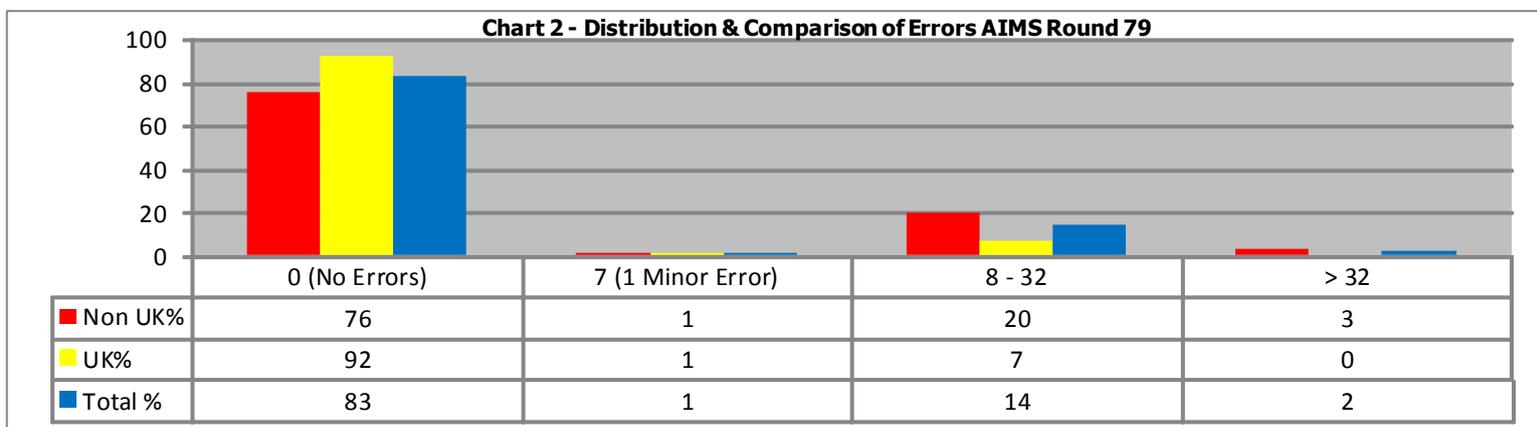
## 1. Type Of Errors Obtained



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. 301 (83%) 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; 147 (92%) UK laboratories and 154 (76%) 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. 22 laboratories (6%) in total had not yet completed 3 rounds and therefore did not accumulate a score. Following this round, 244 laboratories (66.3%) obtained a good cumulative score (0 – 7 penalty points cumulatively). 84 laboratories (22.8%) obtained an acceptable cumulative score (8 – 32 penalty points cumulatively) and 18 laboratories (4.9%) obtained an unsatisfactory cumulative score (33 or more penalty points cumulatively).

**Chart 3 - Distribution & Comparison of Cumulative Scores Following AIMS Round 79**

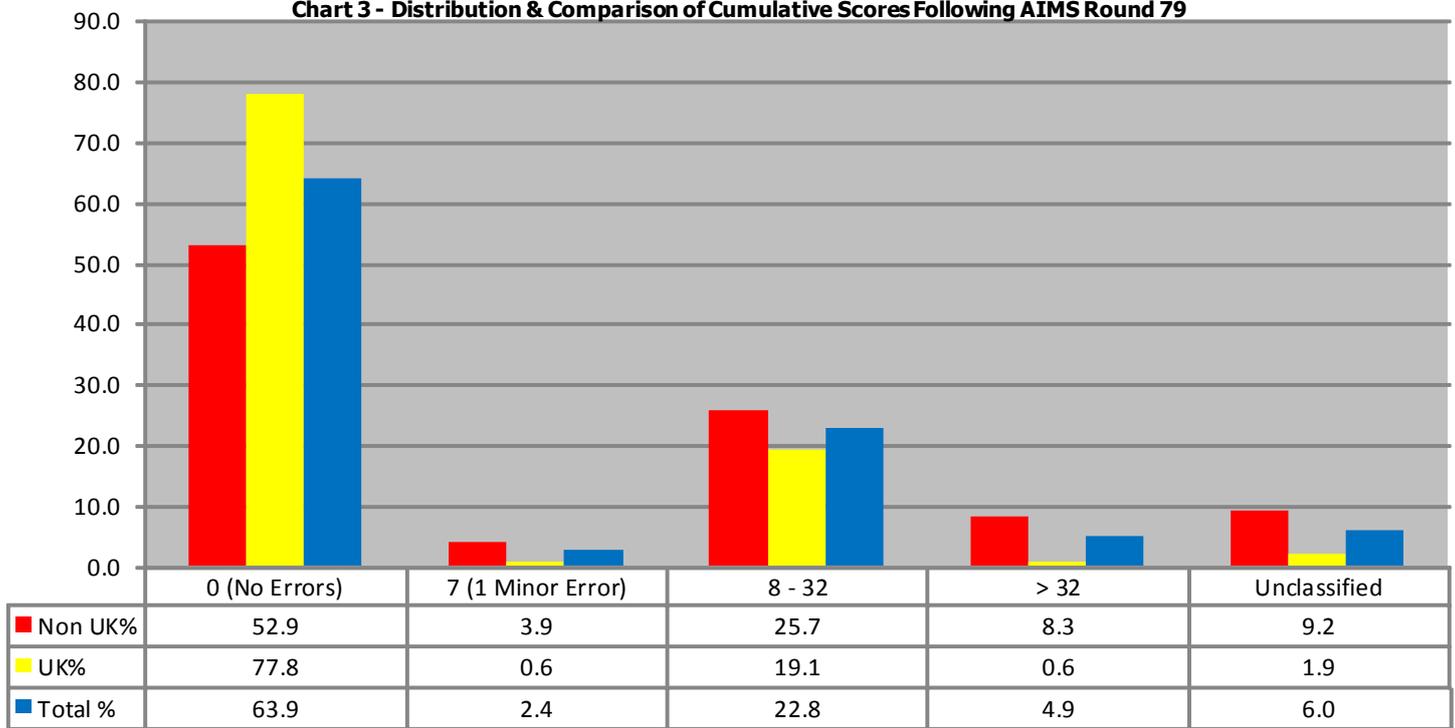
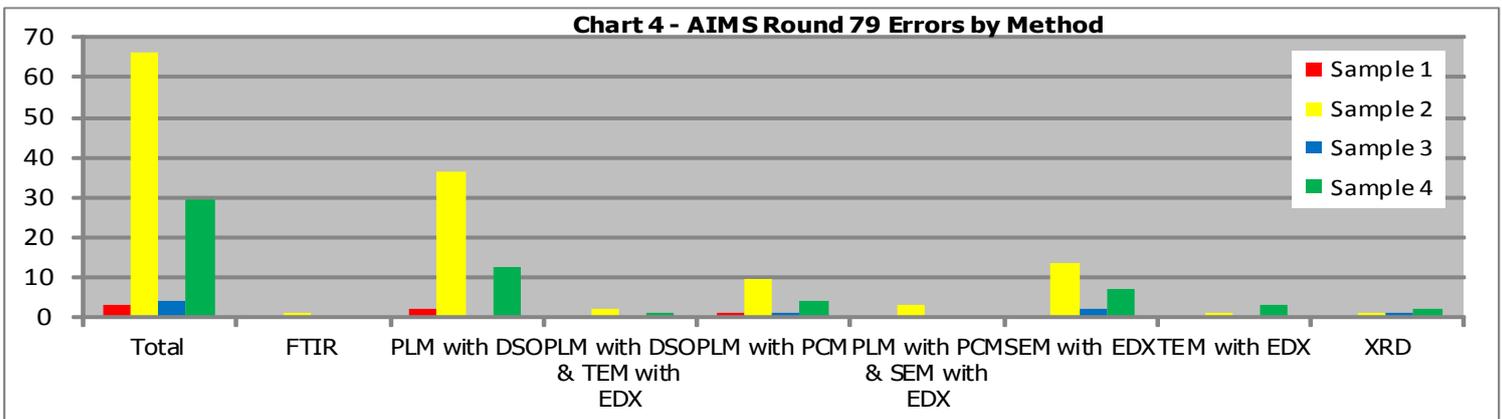


Chart 4 shows the number of errors made on each sample for all UK and Non-UK laboratories.

PLM - polarised light microscopy. DSO - dispersion staining objective. SEM - scanning electron microscopy. EDX - energy dispersive X-ray. TEM - transmission electron microscopy. FTIR - Fourier transform infra-red.

**Chart 4 - AIMS Round 79 Errors by Method**





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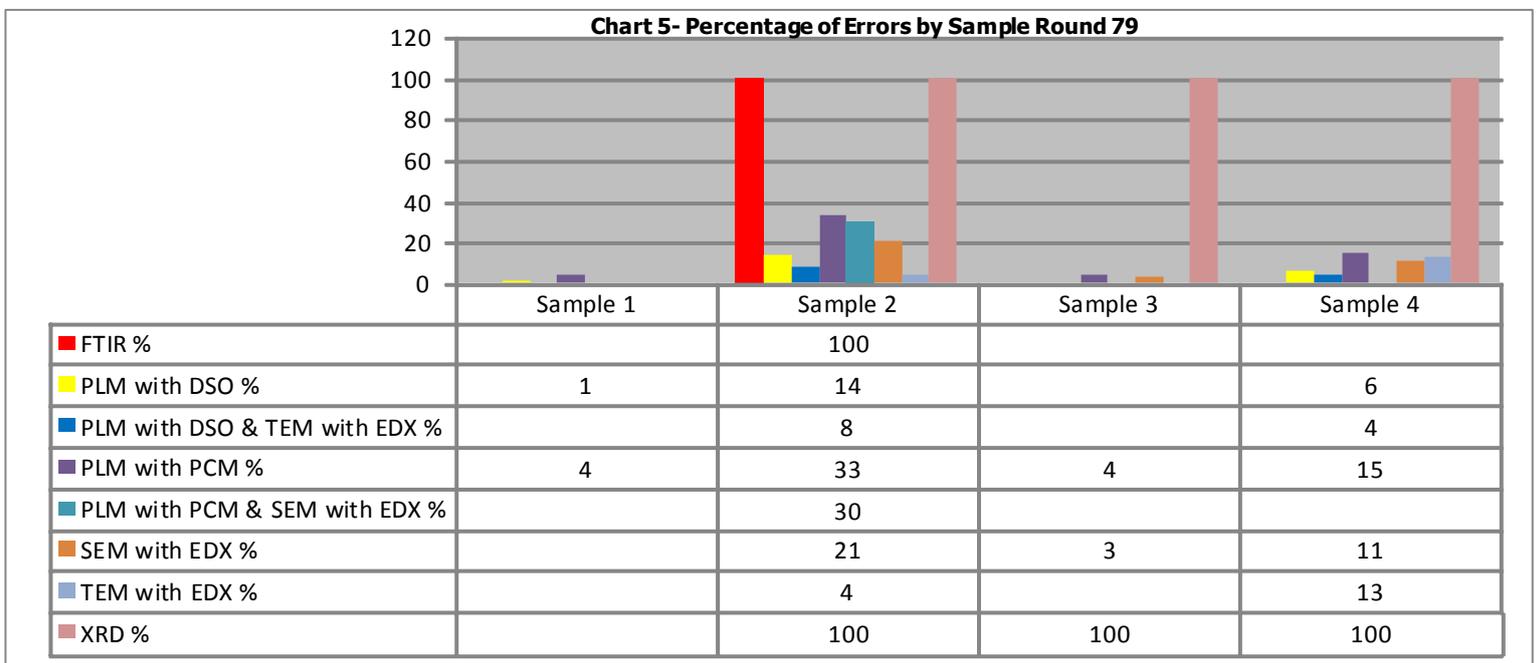


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Chart 5 shows the percentage of sample errors by method.

Of the 361 participating labs in R79 the method used in terms of the number of labs was as follows : FTIR, 1 lab; PLM with DSO, 195 labs; PLM with PCM, 26 labs; SEM with EDX, 63 labs; TEM with EDX, 24 labs; PLM with DSO & TEM with EDX, 27 labs; PLM with PCM & SEM with EDX, 8 labs; PLM with PCM & TEM with EDX, 13 labs; XRD, 1 lab and Other, 3 labs.



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

The next round of AIMS will be despatched by week commencing 21st August 2023. Please ensure your contact details are kept up to date and inform us straight away if anything needs amending prior to despatch.

Our courier company has advised that overseas laboratories **must** provide their EORI (Economic Operators Registration & Identification) and VAT number to assist customs processing their packages in a timely manner. If you haven't provided this information to us already, please email the PT Team with the details - including your PT Lab number. It is important for laboratories to inform the PT Team if they are having issues receiving their samples due to customs.

If you require a sample to be investigated by HSE following completion of a round, please remember to advise the PT Team within 10 working days of your report being issued so we can let you know the process for returning it to us. There were no samples returned for investigation following R78.

A reminder that we are still mainly working from home, so if you need to contact us please send an email and we will respond as soon as we can.

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