



**Group Report**  
**Round 72**  
**March 2021**



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 72 Sample Details

385 labs were assigned to Round 72 with 379 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 19 independent laboratories using either PLM or SEM analytical techniques.

The round consisted of one commercial sample and three manufactured samples of materials that may contain asbestos and would typically be submitted for analysis at an asbestos testing laboratory. Sample 1 was a commercially produced non asbestos ceramic fibre; Sample 2 was a marble powder sample containing amosite and chrysotile asbestos; Sample 3 was a plasterboard sample containing chrysotile within a white painted layer and Sample 4 was a felt sample containing tremolite asbestos in the bitumen layer.

A number of labs either failed to identify or misidentified both asbestos types in sample 2. Analysts should be aware that samples may contain up to 3 asbestos types and ensure each sample is thoroughly searched. 17 labs failed to identify or misidentified chrysotile in sample 3. Analysts should ensure each sample layer is thoroughly analysed and often the outline of asbestos fibres in the layer can be observed and then extracted individually at the stereozoom stage.

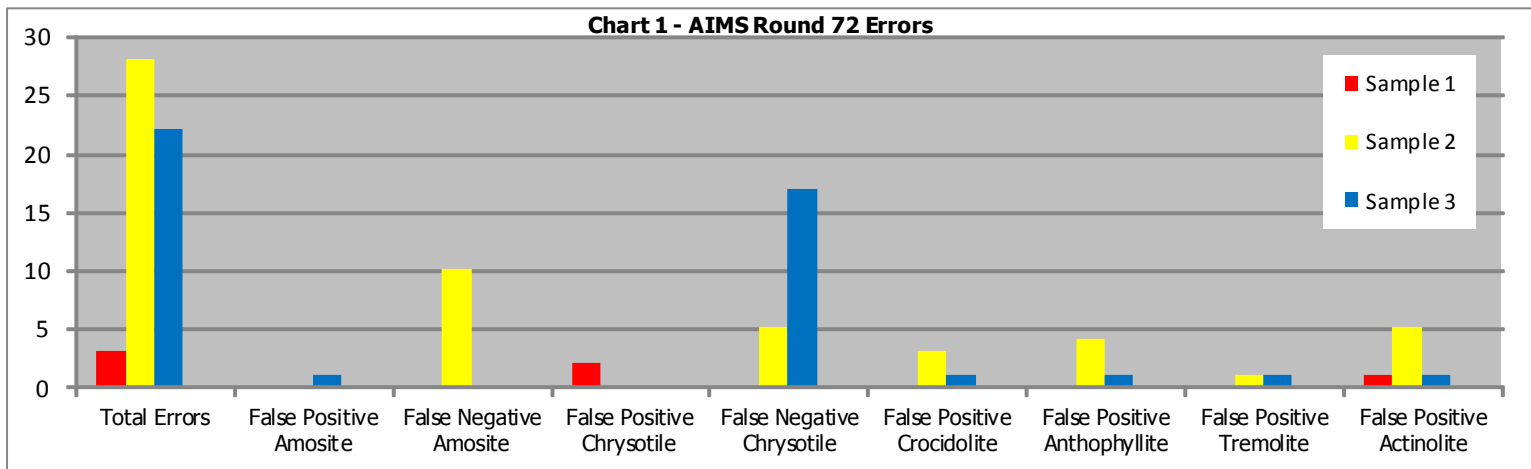
Sample 4 produced the greatest number of errors with 96 labs failing to identify tremolite. It was realised at the screening and validation stages this was an extremely challenging sample. Therefore, the decision was taken to re-release the sample but to not score it. It was hoped labs could learn from analysing the sample, possibly revisit it once the results are released and continue to use it for training purposes. Analytical techniques available include the use of solvents or RI liquid to dissolve or disperse the bitumen layer and release the fibres.

Sample	Validation Number	Product Type	Target Component	Asbestos Present (%)
1	307	Insulation (Commercial)	No Asbestos	N/A
2	308	Powder (Manufactured)	Amosite & Chrysotile	0.1% of each asbestos type
3	309	Board (Manufactured)	Chrysotile	0.8% (in the paint layer)
4	310	Felt (Manufactured)	Tremolite	0.5% (in the bitumen layer)



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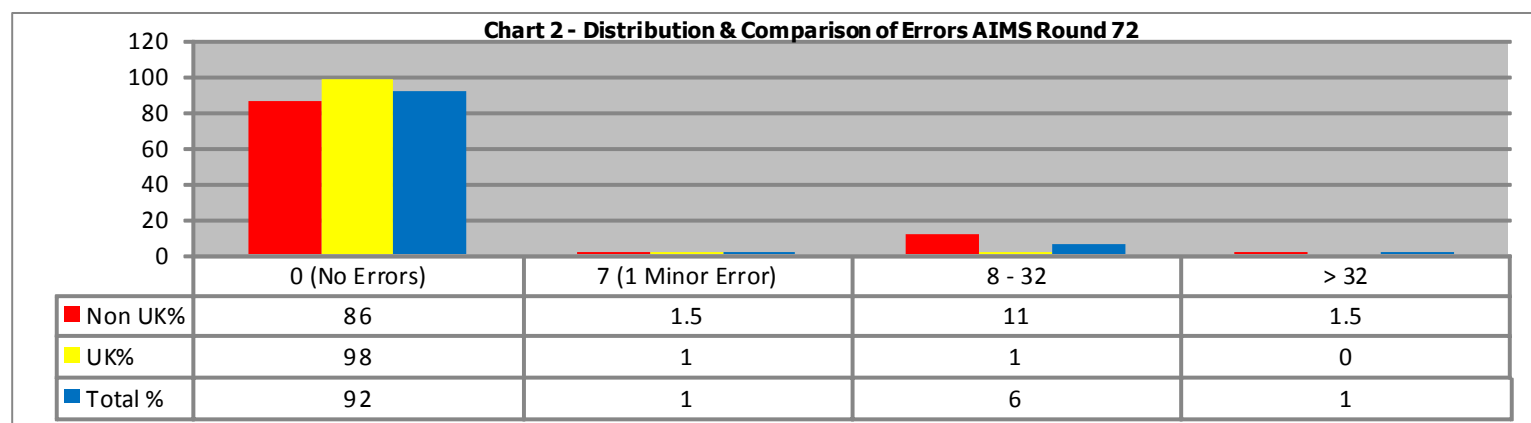
## 1. Type Of Errors Obtained



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. 347 (92%) 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; 168 (98%) UK laboratories and 179 (86%) 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. 17 laboratories (4%) in total had not yet completed 3 rounds and therefore did not accumulate a score. Following this round, 324 laboratories (85%) obtained a good cumulative score (0 – 7 penalty points cumulatively). 32 laboratories (8%) obtained an acceptable cumulative score (8 – 32 penalty points cumulatively) and 12 laboratories (3%) obtained an unsatisfactory cumulative score (33 or more penalty points cumulatively).

**Chart 3 - Distribution & Comparison of Cumulative Scores Following AIMS Round 72**

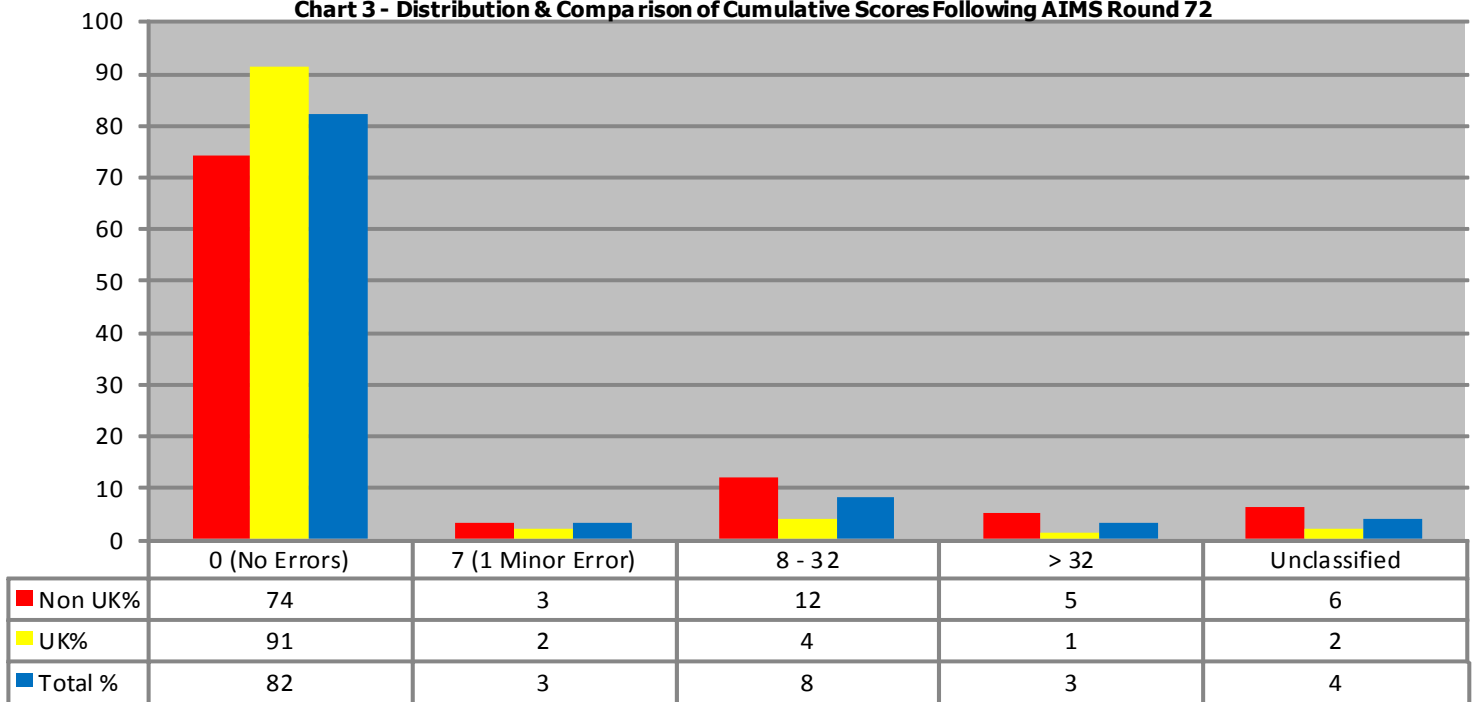
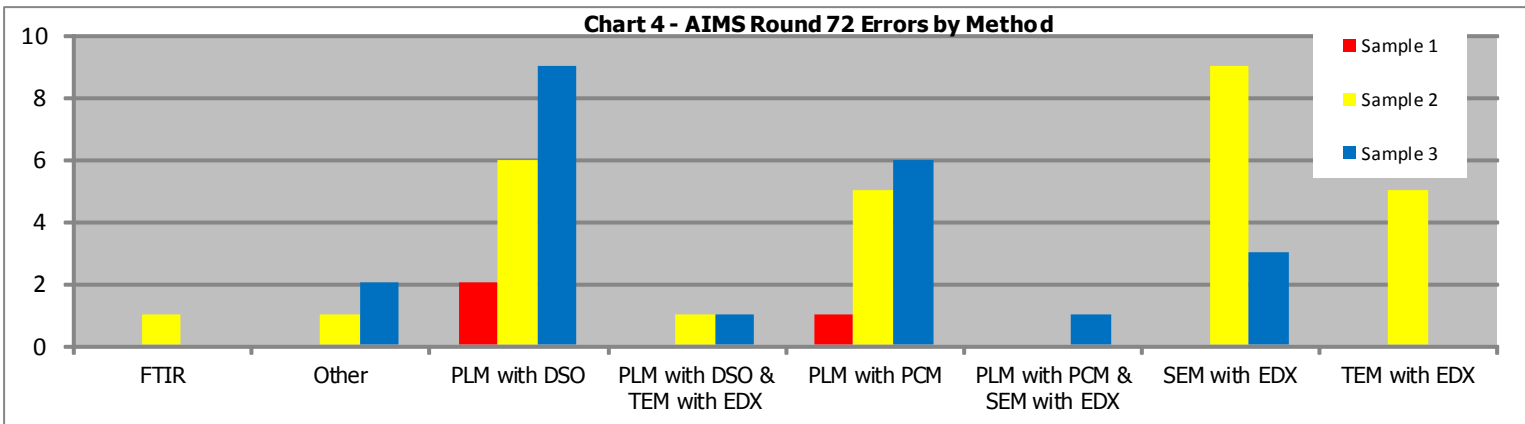


Chart 4 shows the number of errors made on each sample for all UK and Non-UK laboratories.

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. FTIR - Fourier transform infra-red, XRD - X-ray diffraction.

**Chart 4 - AIMS Round 72 Errors by Method**





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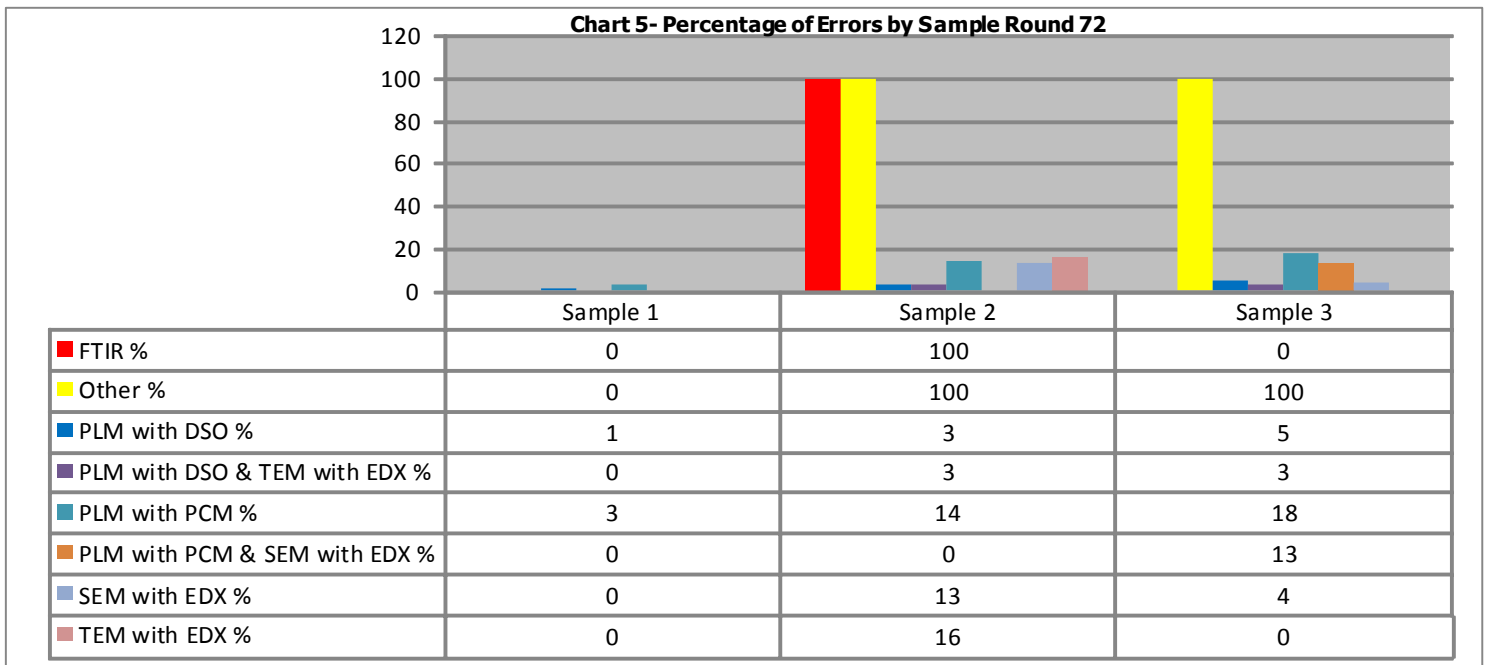


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Chart 5 shows the percentage of sample errors by method.

Of the 379 participating labs in R72 the method used in terms of the number of labs was as follows : FTIR, 1 lab; PLM with DSO, 202 labs; PLM with PCM, 34 labs; SEM with EDX, 67 labs; TEM with EDX, 31 labs; PLM with DSO & TEM with EDX, 30 labs; PLM with PCM & FTIR, 1 lab; PLM with PCM & SEM with EDX, 6 labs; Other, 1 lab and PLM with PCM & TEM with EDX, 6 labs.



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

Subscriptions for 2021/22 are now available on the PT Online Data Entry System. Please log on and subscribe at your earliest convenience to guarantee participation in the scheme. The next round of AIMS will be despatched week commencing 26th April 2021. Samples will not be despatched until full payment has been received. 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 have advised that overseas laboratories should be providing 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 on your subscription, please email the PT Team with the details - including your PT Lab number.

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. Following R71 no samples were returned to HSE for investigation.

Our Quality Control Samples are now available to purchase online. If you wish to purchase any of our AIMS QC samples, please contact the PT Team for further information. For laboratories who wish to replace the last round of AIMS, we have PT038R. Participants are able to replace one in three rounds of AIMS. Our new price list for 2021/22 will be available from 1st April 2021.

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

Melanie Clunas  
 AIMS Scheme Co-ordinator



Email: [proficiency.testing@hse.gov.uk](mailto:proficiency.testing@hse.gov.uk)  
 Telephone: +44 (0)203 028 3382



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