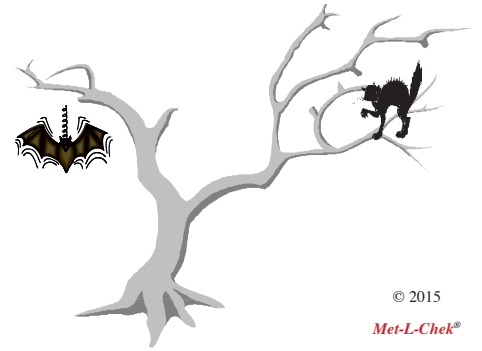




# The Penetrant Professor from *Met-L-Chek*<sup>®</sup>



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## AMS Committee K

The 67th meeting of Committee K was held on September 21 in Ft. Lauderdale Florida during the **A4A NDT Forum**. One item of interest for penetrant and MPI users was the announcement by **John Brausch**, of the USAF Materials Laboratory, that the new LED UV-A lamp specification **ASTM E-3022** was issued. This will begin to impact those who have purchased LED UV-A lamps because they will have to have proof from the lamp manufacturer that the lamps meet the specified emission peak around 365nm. This will impact on penetrant and MPI specifications that will have to be updated sooner than their scheduled update cycles.



Another item discussed was the re-qualification of penetrant materials to **AMS-2644** when the manufacturer makes a formula change. The question raised was whether a new product number was required or could the manufacturer use the prior nomenclature, and if so where was the guarantee that the performance would be the same if the same name or number was used.

There is also concern that as manufacturers begin to manufacture penetrant materials around the world and in different plants; are the materials all equal if the name or number is the same from different manufacturing plants?

Let's start with what is required if the formulation is changed. The formulation is a specific blend of different chemicals which yield results that meet the requirements of **AMS-2644**. If for some reason the manufacturer needs to reformulate a material by changing the chemicals

used then this is a new material and needs to go through re-qualification.

This then becomes a marketing question besides a technical one. If the material that has been reformulated performs like the prior material, the physical properties are similar and the materials will mix well, then a supplier might choose to keep the same designation. To this end the Materials Lab has evaluated 50/50 blends of reformulated materials with the prior version to ensure that performance is not degraded. On the other hand if there are differences in physical properties, performance, or incompatibility then the designation would normally be changed to avoid problems in the field for users.

There are historical cases when a manufacturer made changes but did not go through the approval process to avoid making a product name change. Problems developed in the field costing the user and the



supplier far more money than the short cut was worth. A poor marketing decision. So, avoid problems, buy from a reputable supplier!

The USAF Material Laboratory will begin scanning materials from different manufacturing facilities to determine if there are significant chemical signature differences for a material made in different plants. If there are differences then the materials will have to be re qualified from each location. This is a good idea to ensure users that what they think they are getting is qualified to the [AMS-2644](#). It would be a mistake for a supplier to make different materials in different plants and call them the same thing.

Met-L-Chek fully supports the USAF Materials Laboratory in this endeavour to ensure the reliability of inspection around the world.



There was also a brief discussion regarding magnetic particle materials. The USAF is considering looking into any detectably performance differences in the materials being used in the military. It is early but this might grow into an approval process along the lines of those for penetrants.

**PENETRANT PROFESSOR**

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To receive it, call or E-mail Lisa Zugarazo.

**New Look,  
Same Reliable Stuff**

Over 2 years ago Met-L-Chek began to change the look of its labels when the new type of aerosol can and shrink label were introduced. This look has now been applied to bulk material labels.

Part of the change was to accommodate the label information requirements of **GHS**. We had written about the “**Global Harmonized System for Classification of Chemicals**” two years ago explaining that new warning information and symbols were being required for all chemical materials. All companies, using chemicals, were to have trained their employees by December 2013 in the **GHS** requirements. Yet, this very week we have had a user ask, “what has changed with your product, the label and **SDS** are different”? When we explained, the response was “**GHS** what’s that”?

Nothing has happened, the same reliable materials users have been satisfied with for years, are still in the cans. The look is different, the label and **SDS** information are different, because of regulatory changes, but the products are the same.

Some suppliers have been going through product changes because they did not anticipate the regulatory changes. Met-L-Chek made the decision to move forward long ago and the result is consistency in the



product line. Makes it much easier on the users who do not have to change documentation because of a product name change.



**ASNT Fall Meeting**  
Salt Lake City, Utah,  
October 26th - 29th.  
Tuesday, Bill Mooz, President of Met-L-Chek, will speak on the Evolution of the Qualification of Penetrant Materials.

**ASNT San Diego Section**  
December 1, 2015 meeting  
Bill Mooz will give a talk on Running the Rapids on the Colorado River through the Grand Canyon.  
Not to be missed.  
Hold onto your oars!



*The Penetrant  
Professor*