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New X-MET8000 application note: Chlorine in plastic materials

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To: **All X-MET Sales managers, Sales and Distributors, Service managers, Applications**

Dear colleagues and partners,

I am pleased to announce the release of a new **X-MET** application note: **X-MET**8000 for the rapid determination of chlorine in plastic materials.

Background information:
Over 60% of all chlorine is used in the production of plastics, such as PVC, poly-urethanes, epoxy-resins, Teflon, neoprene etc., for use in the construction, automotive, electronics and electrical components industries.

There are several “issues” related to the presence of chlorine in plastics, and the use of PVC and other chlorinated polymers has been banned from specific products in many countries.

Issues linked to presence of chlorine and plastics and our solution:
Because it is non-destructive, quick and easy to use, handheld XRF can be used to determine chlorine contents in applications such as:

- Plastic recycling process: polyvinyl chloride (PVC) needs to be sorted from other plastics, as the corrosive nature of hydrochloric acid that is released from PVC at high temperatures can damage the recycling equipment, including masonry in the incinerators.
    - The X-MET8000 Optimum and Expert’s Plastic FP calibration enables to identify PVCs through the high chlorine content, enabling users to separate out PVCs in seconds.
- Cement industry: the above also applies, as waste-based fuels are often used in the kilns to reduce energy costs.

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    - There again, the X-MET8000's Plastic FP calibration will enable users to screen incoming waste and reject it if the chlorine levels are too high and present a danger for the integrity of the kilns.
- Regulatory compliance screening: plastic materials can be checked for chlorine content during the incoming inspection of raw materials (e.g. plastics granules), through to the finished products, to ensure compliance with regulations such as the halogen-free directive.
    - With its close-coupled geometry and large area detector, the X-MET8000 delivers the low limits of detection that are required for this application.

The new application note (now available on the Extranet) highlights how the **X-MET**8000 **Optimum** or **Expert**, with our Plastic FP method, is the tool of choice for the rapid, on-site testing of plastic materials.

To further promote the X-MET8000 for this application, we have:

- Updated the Oxford Instruments website pages:
    - http://www.oxford-instruments.com/industries-and-applications/energy-environment/recycling
    - http://www.the-experts.com/analysers-for-recycling/
- Posted news on Social media:

Please make sure you re-tweet, share or forward this new application note to your contacts!

Best regards,

Christelle Petiot