Customer Information Note

Changes to the classification of some offset printing ink colours

This customer information note is intended to inform printers and other users of printing inks of a potential change in hazard classification that may affect certain ink colours. This change will be particularly noticeable if these inks have previously been not classified as hazardous.

This change is happening not because the ink formulation has been modified, but as a result of additional information concerning the components used in the ink, coming from toxicity testing using updated test methods.

Many pigments are manufactured using additives to influence their characteristics and application properties. For example, resins added to the reaction mixture during or immediately after coupling, will modify crystal growth, to produce transparent pigments which are readily dispersed with high colour strength for use in printing inks. This process is often referred to as rosination, and usually involves rosin (colophony) or simple rosin derivatives, such as esters and Diels-Alder adducts. It is particularly common in the manufacture of yellow and some orange and red pigments used in offset inks.

Many years previously, the pigment manufacturers tested several commercial pigments manufactured using rosin and found that, although rosin was classified as a skin sensitiser, the rosinated pigments did not demonstrate skin sensitisation. This information was used to avoid classifying the pigments as skin sensitisers.

With the more recent changes to chemical legislation, testing methodology and classification and labelling requirements, the pigment manufacturers have advised that the results generated previously should not be relied upon, and now recommend that the skin sensitisation hazard of the rosination should be taken into consideration.¹ In addition, the manufacturers of simple rosin derivatives have also determined that many more of their products should now be classified as skin sensitisers,² as compared to previously.

The consequence of this is that certain pigments, manufactured with rosin (colophony) and rosin derivatives, will be classified as skin sensitisers if the rosination is more than 1% by weight. The level of rosination on the pigment may also be sufficient to require that the ink is similarly classified. Since only certain pigments are manufactured using this rosination process, only certain ink colours will be affected; colour blends will be dependent on the actual level of rosin or rosin derivative present in the finished ink.

Warning Contains rosin [H317] May cause an allergic skin reaction

¹ http://etad.com/en/component/attachments/attachments.html?id=89
This classification change could alarm printers if they have previously been accustomed to only using products which are unclassified. However it is the responsibility of EuPIA members, and all ink suppliers, to classify and label printing inks correctly and ensure that the appropriate hazard information is communicated to customers, to allow them to take appropriate risk management measures as required according to legislation. This is particularly important, even where there may be pressure to avoid hazard labelling, or where some pigment suppliers do not have the knowledge, expertise or inclination to provide the correct hazard information. Users should avoid skin contact with printing inks which are classified as sensitisers and follow the risk management measures communicated in the safety data sheet.

There are some specialist pigments available, which are manufactured using specific resins that have been thoroughly tested using current methods and found not to be skin sensitisers. Such colourants would not require the printing ink to be classified as skin sensitising; however these materials have a cost premium. For more information please consult your ink supplier.

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