

## Using sheetfed offset prints in baking and microwave ovens

In baking ovens, temperatures can reach levels above 200°C and additionally, baking times may exceed one hour. Under these conditions decomposition of the paper components is initiated. By this, degradation products of unknown composition are formed, which may migrate into the food.

Provided, that a heating above 220°C can be excluded, the special inks listed below are suitable for such applications. This is confirmed by an investigation of Isega. The corresponding Isega certificate will be provided upon request.

The suitable products are:

Novasens® 224595 PREMIUM Yellow  
Novasens® 224600 PREMIUM Magenta  
Novasens® 4 P 660 PREMIUM Cyan  
Novasens® 660 PREMIUM Black

The applicability of the substrate must be confirmed by the producer.

In microwave ovens, food is normally not heated above 100°C, the heating times are several minutes. Under these conditions printing ink films are stable. Therefore sheetfed prints may be used as food packages for warming in microwave ovens, as long it is assured by using low migration inks, that there is no deterioration of the food by printing ink components in the time between packing and warming in the microwave oven. Detailed information about “printing inks for food packages” is available from EuPIA ([www.eupia.org](http://www.eupia.org)).

Occasionally, it is reported that empty or part filled paper or board containers, heated in a microwave oven, may become overheated or even inflame after the water content evaporates. Therefore it is recommended to place hints to avoid overheating.