

## KUNDERT Polyurethane systems

Color differences with polyurethane materials

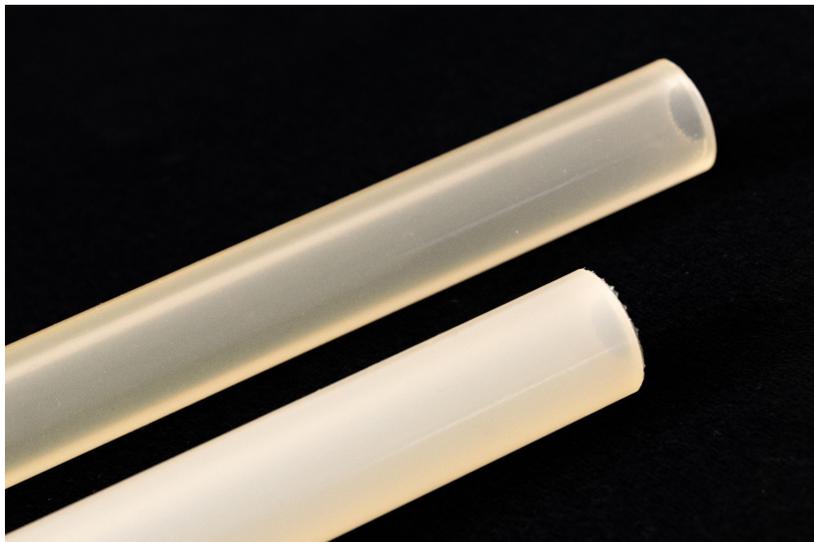
TECHNICAL DOCUMENTATION

### Color differences in non-colored polyurethane articles

In the case of polyurethane materials without coloring (color additive), color differences may occur within a production series - due to manufacturing-related variations in the raw materials used (usually from yellow-translucent to white-translucent, or from whitish to yellowish to brownish). If uniform coloration is required in the application, coloring is essential. However, it should also be noted that color additives can slightly influence the technical properties. Most color additives neither meet the requirements for repeated food contact according to FDA (Regulation Reference 21CFR 178.3297) nor do they

comply with the requirements of the European Food Contact Systems EU Regulation 10/2011/EU and 1935/2004/EC. The only color approved for food contact is blue (see next page).

The perception of the color and color differences strongly depends on the existing light conditions and the environment (e.g. base on which the components are viewed) and may differ from the photos shown below. The photos are only intended to give an indication of possible color differences.



*Color differences: from yellow-translucent to white-translucent*



*Color differences: from whitish to yellowish to brownish*

## Recommendation

In order to maintain consistent color quality, we recommend ordering items from the polyurethane in one of our standard colors or according to your specific color request.

\* According to our color suppliers, the dye meets the requirements for repeated food contact according to FDA (Regulation Reference 21CFR 178.3297).

According to our raw material suppliers, the dye used meets the requirements of the European Food Contact Systems EU Regulation 10/2011/EU as well as 1935/2004/EC.

Our standard colors are:

- White
- Yellow
- Signal yellow
- Brown
- Red brown
- Red
- Blue \*
- Green
- Gray
- Black

All information about our products are based on our today's knowledge. Information about material characteristics coming from our suppliers and have not been verified by ourselves. That information are not to understand as a confirmation for certain characteristics of our products. These information as well as our concrete application-technical indications in spoken or written form, do not loose you from your own verification of the products upon the applicability for the intended application. Our information are without obligation – as well as they affect the proprietary rights of a third party – and cannot result in liability. The warranty for the quality of our products as well as our liability tends to incidentally after the known standard sales- and delivery terms of KUNDERT AG.