



# Stability of Cosmetics

It is a requirement of the Cosmetic Regulation that stability testing is carried out under “reasonably foreseeable storage conditions” in order to establish that no separation, crystallization, contamination, degradation or other instability occurs. Testing covers changes in appearance, colour, odour, pH, viscosity, density, pack performance etc.

At MSL, we are pleased to be able to offer a wide variety of Conditions. We generally break down our Conditions into 3 suites (A-C) as we find this suits most clients’ needs. However, bespoke packages and extra conditions can easily be added as required. All our stability packages are designed to be able to assign a maximum of 3 years shelf life although an extended shelf life (i.e. up to 5 years) can be predicted in certain circumstances.

In addition to stability testing of the product we can also offer pack performance and compatibility testing. This includes investigation into the effects of various conditions on the final packaging e.g. loosening of cap wads, exfoliation/peel of labels, corrosion/stress cracking of containers, swelling of dip tubes, inadequate barrier properties of packaging etc. These are designed specifically for each product depending upon individual product requirements.

## The conditions offered include:

**Temperature variations** (from -18°C to 60°C) – Constant and Cycling. Temperature cycling from very low to ambient or higher temperature is the condition where preservative issues are usually picked up or are likely to fail.

Consideration should be given to the transport and storage conditions of the products (Temperate, Mediterranean/Subtropical, Hot & Dry, Hot & Humid).

**Fade Lamp** (Ambient) – Daylight / Store light simulation (we can meet the lighting requirements of the Boots, M&S and supermarket standards, also UV light testing). We have bulbs for D65, F840, P15, TL83 and UV, with capacity to add additional bulbs as required.

**High Humidity** - Consideration should be given to the location of manufacture, shipping conditions and anticipated storage of the products for example, in a domestic bathroom.

**22 degrees (Dark)** – This condition is usually used as the Reference Standard to which all other conditions are compared.