

Surface Tension Test Pens (Dyne Test Pens)

Surface tension test pens were introduced to give an accurate measurement of graduated surface tension levels. The fluid is applied to the surface or substrate until a satisfactory dyne level is found.

Experience has shown that wetting is normally adequate when a continuous film of test fluid remains intact for 2 seconds. Breaking of the fluid into droplets in less than 2 seconds indicates a lack of wetting and a lower numbered test fluid should be tried. If the fluid remains intact for longer than 2 seconds, a higher numbered test fluid should be tried.

A clean, new cotton applicator should be used each time to avoid contamination of the solutions ensure the film surface is not touched or contaminated in the areas in which the tests are to be made.

These pens are widely used in PS、PE、PP、PET、PI、PC、NY、CPP、OPP、PVC etc.

Biuged offer 16 sorts different dyne value pens (30,32,34,36,38,40,42,44,46,48,50,52,54,56,58,69 dyne). Please select the correct type when ordering.

Procedure:

- ◆ Draw with a pen on the test area of about 1 inch
- ◆ Check the time how long it takes the ink changes to small drop or makes peripheral shrinkage. After 2 seconds, there is nothing change, repeat the test with higher dyne pen.
- ◆ Suitable dyne is that takes 4 seconds till the ink changes to small drop or makes peripheral shrinkage.
- ◆ Surface energy should be more 10 dyne than ink, adhesive, coating.
- ◆ When the liquid drops in the surface of material, if surface energy of material is lower than surface energy of ink, the shape of ink is Marble.
- ◆ On the contrary to this, if surface energy of material is bigger than surface energy of ink, the ink uniformly spread on the surface.



★ Ordering Information:

- [BGD 1146---Surface Tension Test Pens \(5ml\)](#)
- [BGD 1147---Surface Tension Test Pens \(12ml\)](#)
- [BGD 1148---Surface Tension Test Pens \(30ml\)](#)
- [BGD 1149---Surface Tension Test Pens
\(Rechargeable 60ml\)](#)