

## Service Life of an Accu-Dyne Test Marker Pen

The pens are suitable for use on virtually all smooth non-absorbent substrates. It is critical that the test fluid does not alter the properties of the substrate, a chemical reaction between the test fluid and the substrate such as swelling will invalidate the test results.

The pens will perform hundreds of tests, noting they will have a six month shelf life, but many customers successfully use them over longer periods.

## Care and Handling

The fluids contained in Accu-Dyne Test Marker Pens are considered hazardous materials. Use with adequate ventilation and avoid contact with the eyes. It is recommended to wear gloves to avoid contact with the skin.

Outdated pens should be disposed of according to your local EPA requirements.

Material Safety Data Sheets are available on request

## Ordering Accu-Dyne Test Marker Pens

Pens are available in a range from 32 to 58 dyne/cm in increments of 2 dyne/cm: 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58 dynes/cm.

They are packed in boxes containing eight (8) pens and may be purchased in any combination of dyne/cm levels per box.

### PHONE, FAX OR EMAIL YOUR ORDER TO:



FLEXCOR AUSTRALIA PTY LTD  
Unit 3 / 429 The Boulevard  
KIRRAWEE NSW 2232  
PH: (02) 9542-3766 FAX (02) 9521-8868  
EMAIL: flexcor@flexcor.com.au



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"Solving Printers Problems"

## INFORMATION SHEET

## Accu-Dyne Test Marker Pens

If you use, manufacture, sell or specify film where corona treatment is involved, plastic sheet, coatings, adhesives, printing ink or paper board or anything that relies on measuring the surface tension or dyne level of a substrate, then you should use Accu-Dyne Test Marker Pens. Developed and introduced onto the market in 1990 by Diversified Enterprises, USA. The first treatment level measuring tool specifically designed for on-line testing, producing fast, reliable and accurate results.

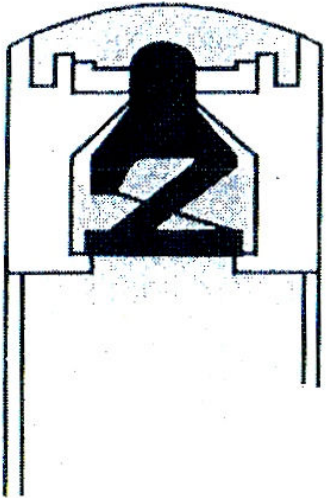
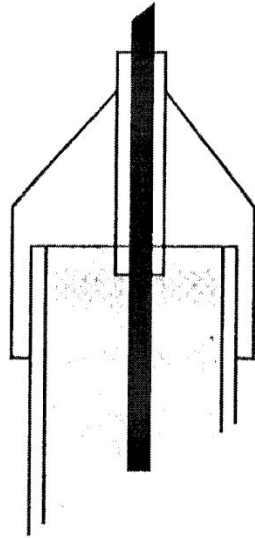
## Why use Accu-Dyne Test Marker Pens?

They provide a simple method of obtaining immediate on-line test results indicating the surface tension of the substrate being used. Inexperienced operators can obtain results with a precision of + or - 2.0 dynes/cm. Dyne solutions may work well in the laboratory or in test bench situations, but out on the shop floor a more simple to use robust device is required. Identical solutions of formamide/ethyl cellosolve, as are present in standard Dyne Testing solutions, are used in the Accu-Dyne Test Marker Pens



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The "Magic Marker" style test pen has a tip that serves as a perfect conduit for contaminants such as plasticisers, slip additives, etc. to penetrate the wick tip and impregnate the Dyne fluid in the pen barrel. It may also allow evaporation of the Dyne fluid even with the cap in place.



The Accu-Dyne Test Marker Pen has a special spring loaded valve applicator which seal off the Dyne Fluid in the pen barrel thus preventing contamination and evaporation.

By pressing the tip down firmly the spring loaded valve opens and fresh fluid floods the tip and flushes it clean. After use the valve closes and seals the pen barrel.

## How to use the Accu-Dyne Test Marker Pen

1. Take a good quality sample of the substrate and secure it on a level surface. Do not touch or contaminate the area to be tested.
2. Allow the sample to stabilise to room temperature.
3. Select an Accu-Dyne Test Marker Pen about 4 dyne/cm lower than the expected level of your sample.
4. Remove the cap, press the pen tip down on the corner of the sample until the tip is fully saturated. This action flushes contamination from the pen tip.
5. Move to the test area and using a light touch, draw the pen across the sample in two or three parallel passes. Evaluate the last pass only.
6. If this last pass remains wetted out on the sample area for three or more seconds, repeat steps 4 & 5 with the next higher value Accu-Dyne Test Marker Pen, or if the last pass beads up or shrinks into a thin line within one or two seconds, repeat steps 4 & 5 with an Accu-Dyne Test Marker Pen having a value at least four dyne/cm lower.
7. Continue using this technique until you identify which dyne/cm value marker pen produces a test pass that holds for one to three seconds. This is the test sample's surface energy in dynes/cm
8. When finished, replace the cap onto the pen and store in an upright position.