PRESCALE

COLOR CORRELATION MANUAL
FOR PRESSURE INTERPRETATION

EXTREME LOW FILM

7.2 - 28 PSI (0.5 - 1.97 kg/cm^2)

TACTILE PRESSURE EXPERTS

SPI

SENSOR PRODUCTS INC.

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INSTRUCTIONS

How to use Extreme Low Film

1. **Cut the film** to the precise dimensions that you will need to conduct the experiment. You will have both a donor sheet and a receiver sheet. Each sheet should be cut to the specific shape.

2. **Prepare the film for use.** Place the two matte (rough) sides together before applying force. By placing these two films together, you will enable the color-forming material on the donor sheet to react with the color-developing material on the receiver sheet. Only by doing this will you be able to conduct the experiment.

3. **Place the film between two contacting or impacting surfaces.** Apply force, then remove. The film will turn a magenta color whose intensity is directly proportional to the amount of pressure being applied. In areas of high pressure, the film will turn a dark magenta; in areas of low pressure, the film's magenta tone will be lighter.

   Be sure to record the approximate length of exposure time to pressure, as well as the temperature and humidity prevalent at the time of the experiment. You will need these variables in order to determine the pressure applied (in PSI) to the film.

How to Interpret Extreme Low Film

In order to determine the approximate PSI applied across the surface area of the film, you will need to perform these four steps.

1. **Match your exposed film to the color calibration swatches on page 3**. Below each color swatch is a density figure. You will need to take note of this figure for use later on in this interpretation process. If your exposed film's coloration is between color swatches, interpolate.

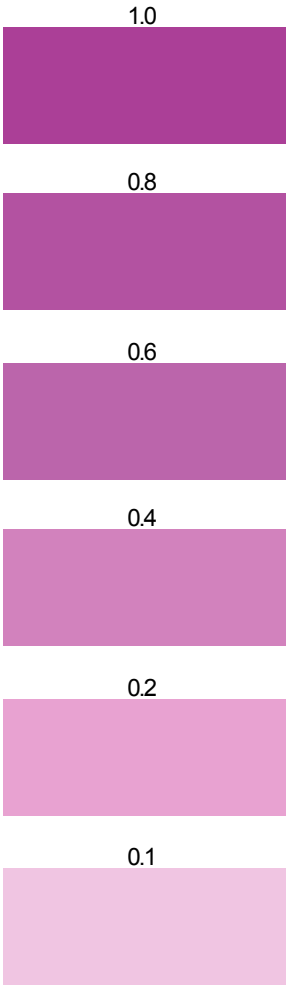
2. **Determine which temperature/humidity zone you are in on page 4 or 5.** This is done by referring to the smaller box located in the top right hand corner of the page. For example, when making measurements at a temperature of 15°C and 40% humidity (RH%), the E zone and the E line in the Density/PSI chart will apply.

3. **Once you have determined the temperature/humidity zone that you are in, proceed to the Density/PSI chart below it** (this is the bigger chart on the same page). Go up the Y axis (Density) until you reach the density value that you obtained in step 1 above. Move to the right until you locate the point where the density value intersects the curve that you determined in step 2. From this point of intersection, follow the vertical line down to the X axis where you ultimately can obtain the actual PSI value. The accuracy of this technique is +/- 15%.

PRESCALE

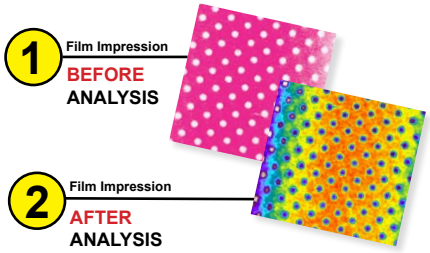
FUJI PRESCALE® EXTREME LOW

Color Correlation Chart



Extract precise statistical data and enhanced digital images from Fuji Prescale® sensor films with Topaq® advanced analysis.

Vital statistics like total force, average pressure, total square inches of contact and standard deviation can be determined with much greater accuracy (±4%) using Topaq's advanced analysis capabilities. Topaq® can also render histogramic and population statistcs on user-defined regions of interest.



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With no risk or obligation receive one FREE analysis.*

Mail one piece of pressure-exposed film to the attention of "Imaging Dept."
Be sure to include the following data with your impressions:

Name _____ Date _____

Company _____

Address _____

Phone _____ Fax _____

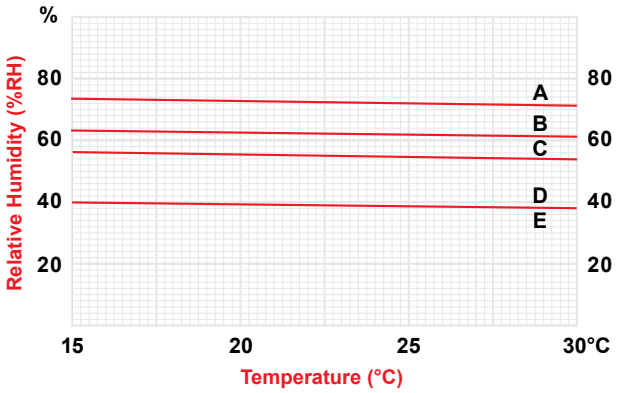
E-mail _____

1. Film type used (PSI of kg/cm²) _____
2. Approximate exposure time _____
3. Approximate temperature _____
4. Approximate relative humidity _____

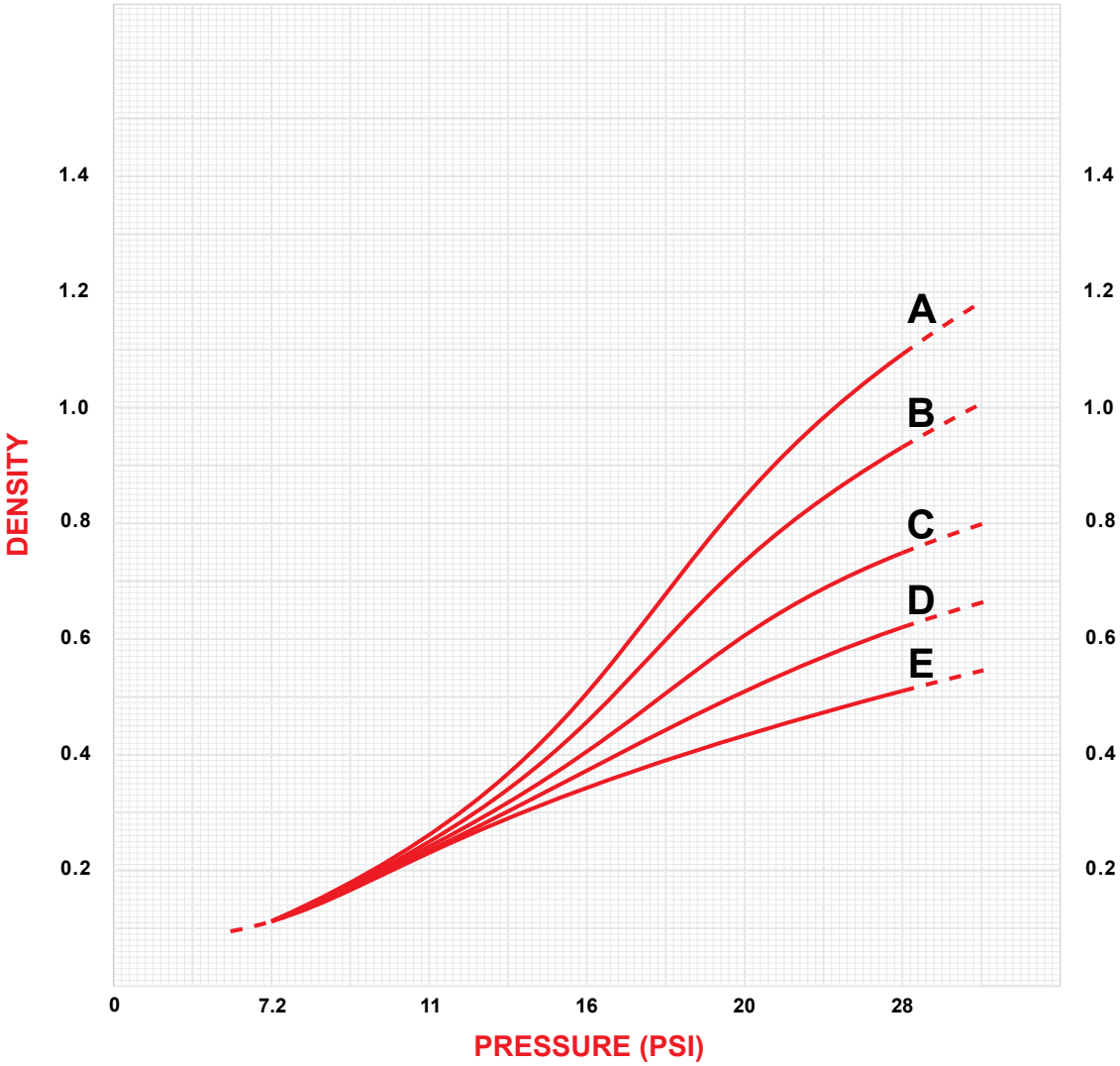
* Size of pressure-exposed film cannot exceed 11" x 17".

Continuous Pressure Standard Charts

TEMPERATURE & HUMIDITY CHART

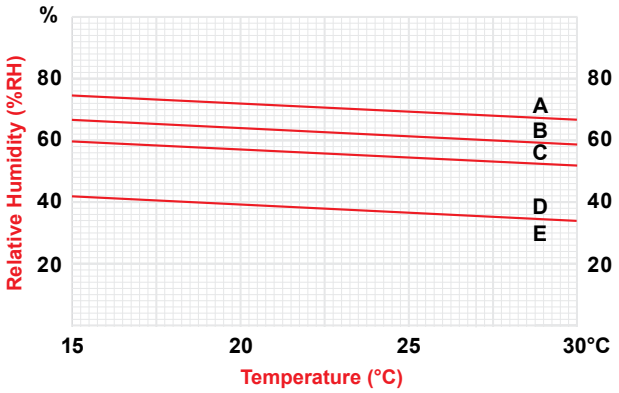


DENSITY / PSI CHART



Momentary Pressure Standard Charts

TEMPERATURE & HUMIDITY CHART



DENSITY / PSI CHART