

J **EFFECT OF HUMIDITY ON THE MOISTURE INTAKE OF
LACE CREPE RUBBER**

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Pale crepe is the purest form of light colour raw natural rubber available in the market today. The price paid for this visually graded form of rubber depends on the pure water white appearance of the rubber. It is known that both the non rubber constituents present in natural rubber latex and the excess moisture in the

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incompletely dried laces of rubber cause mould growth on rubber, thus lowering the quality. It was also suspected that the storage of the finished crepe rubber in humid atmospheres, tremendously increased the tendency to mould growth on the surface of rubber even after the non rubber constituents in the rubber are minimised by fractionation. Hence an attempt was made in this project to study how the humidity of the outer atmosphere affects the mould growth on crepe rubber.

The results of this experiment indicate that although the rubber hydrocarbon does not absorb moisture from the atmosphere, proteins and lipids in the non rubber fraction of the latex are hygroscopic and hence have a tendency to absorb moisture from the humid atmosphere.

Further, the results clearly show that the removal of a higher percentage of the yellow fraction reduces the moisture intake of the perfectly dried laces. The higher percentage of fraction remaining in the partially fractioned rubber and the yellow fraction itself accelerates the moisture intake in more humid atmospheres; reaching the volatile matter percentages above 0.7%, in a period of about a week. Effect of the removal of different percentages of yellow fraction from the latex and the effect when each grade of rubber is suspended at different humidity levels will be discussed.