6. CONCLUSION

1. According to the test results mentioned, almost all the data ranges for physical properties including specific gravity, hardness, tensile strength, elongation at break and moisture content of blend No: 1, blend No: 6, blend No: 10 and blend No: 12 were quite comparable with that of the specifications of friction cords available at market for use in rubber compounds

2. Moreover, frequency of occurring of deviated results from the accepted range was minor in blend Nos: 2, 3, 4, 5, 7 and 8. Therefore the ranges of those blends were also accepted.

3. Scattered data obtained for individual materials such as R_1, R_4 and R_7 prior to blending have come closer after blend No: 11, blend No: 13 and blend No: 14 were prepared. That means all the properties can be controlled within a particular range.

4. In comparison the results of each blends, it was evident that materials having higher results for parameters should be mixed together with that having lower results for parameters gave better properties. Therefore it can be come to the conclusion that friction cords can be standardized by physically mixing friction cords in different weight proportions.

5. It was evident from the results of experiment that almost all the properties except the specific gravity of R_4, got varied within the same bulky material (rubberized nylon friction). Therefore the variation in each and every property was the common feature found in friction cord.

6. Replacement of nylon flocks in prepared rubber compounds with friction cords have made an influence on the vulcanization process and on formation of cross links in the rubber compounds by reducing the lower minimum torque, scorch time (t_{10}) and optimum cure time (t_{c90}).

7. Maximum torque got increased with the increased quantity of friction cord and as a result of this hardness property also increased. Addition of friction cords also led to the increase in tensile properties, and modulus at 100 % elongation whereas the specific gravity and elongation at break of compounds remained at same level for all prepared compounds.

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