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APPENDICES

Appendix I

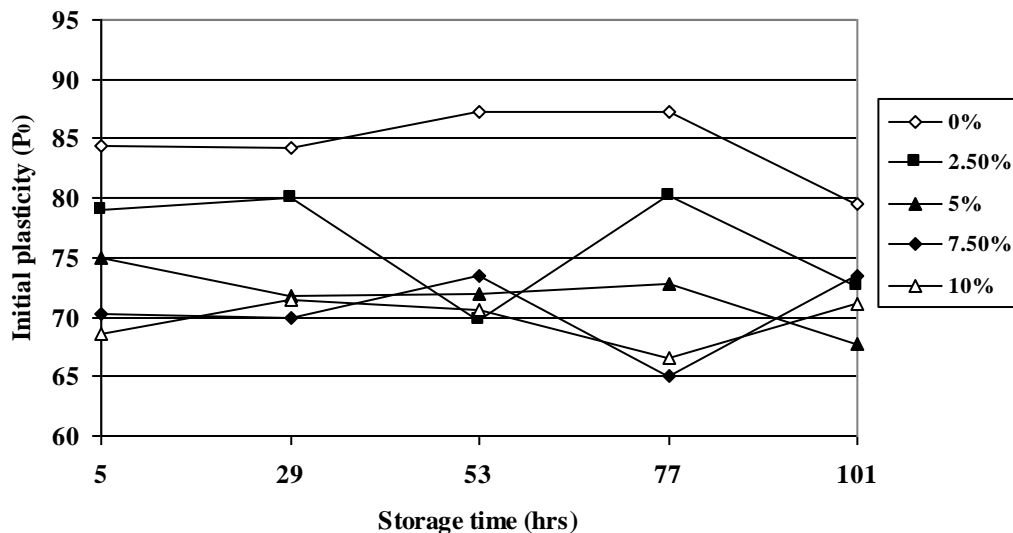


Figure 1 Variation of initial plasticity of the reclaimed rubber samples with storage time at constant concentration of the amino compound



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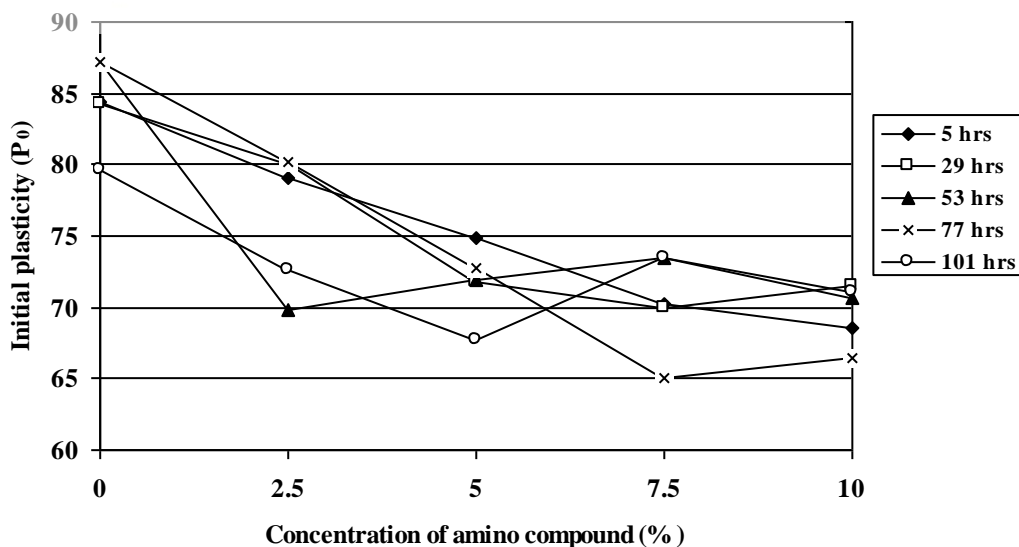


Figure 2 Variation of initial plasticity of the reclaimed rubber samples with concentration of the amino compound at constant storage time

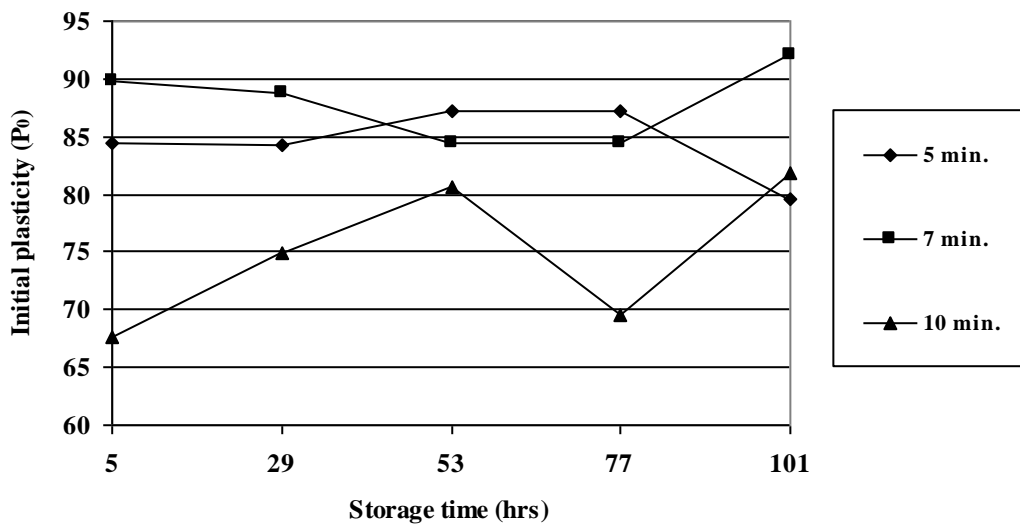


Figure 3 Variation of initial plasticity of the reclaimed rubber samples with storage time at constant milling time

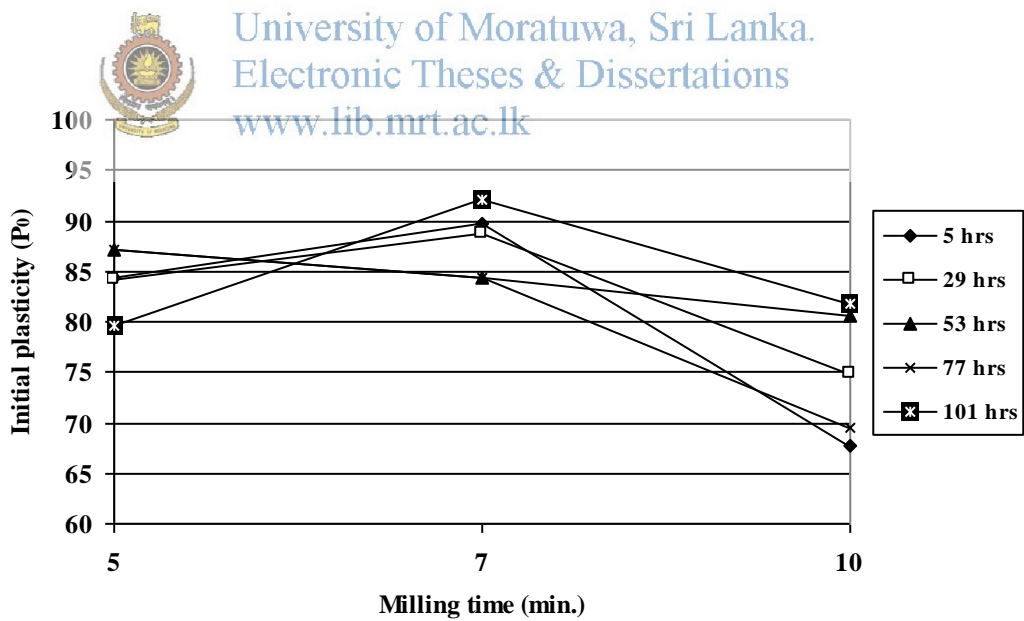


Figure 4 Variation of initial plasticity of the reclaimed rubber samples with milling time at constant storage time

Appendix II

Calculation of the Cost of Novel Reclaimed Rubber

Table 1 Retail prices of materials and ingredients used for preparation of novel reclaimed rubber

Material / ingredient	Retail price, Rs. (per kg)
GRT	40.00
Amino compound	80.00
Aromatic oil	240.00


Raw material cost:

GRT - 200g - Rs. 8.00

Amino cpd - 15g - Rs. 1.20

Aromatic oil - 20g - Rs. 4.80

Total - 235g - Rs. 14.00

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Material cost of 1 kg ~~Rs. 59.57~~ Rs. 60.00
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Overheads (for 5 minutes):

Electricity - Rs. 0.90 (430 W mixer)

Labour - Rs. 6.37 (650/= per day, i.e. for 8.5 working hrs)

Manufacturing cost (per kg):

Material cost - Rs. 60.00

Electricity - Rs. 0.90

Labour - Rs. 6.37

Total (manufacturing cost) - Rs. 67.27

10% profit - Rs. 6.73

Selling price - Rs. 74.00

Note : Prices of two commercially available reclaimed rubbers are Rs. 82.00 and Rs. 140.00.

Appendix III

Publications

J.K. Premachandra, **D.G. Edirisinghe** and M.I.A. De Silva (2011). A novel reclaiming agent for ground rubber tyre (GRT) Part I : Property evaluation of virgin natural rubber (NR) / novel reclaimed GRT blend compounds, *Progr. Rubber Plast. Recycl. Technol.*, Vol.27, No.1.

D.G. Edirisinghe, M.I.A. De Silva and J.K. Premachandra (2011). A novel reclaiming agent for ground rubber tyre (GRT) Part II : Property evaluation of virgin natural rubber (NR) / novel reclaimed GRT revulcanisates, *Progr. Rubber Plast. Recycl. Technol.*, Vol.27, No.3.



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