

Impact Of High Prices Of Chemicals & Compounding Ingredients On Mechanical & Rubber Goods

My predecessor on this subject has already dealt with the some of aspects of the increase in cost of production of rubber products, as a result of increase in prices of chemicals and compounding ingredients that go into the manufacture of rubber articles. I have taken for the purpose of discussion at this Symposium a typical common formula for mechanical and moulded rubber goods, and would like to deal with the impact on the compounding cost as a result of the changes in prices between 1960 and 1965. The chemicals and compounding ingredients that go into the mechanical and moulded rubber goods other than raw rubber are Zinc Oxide, Stearic Acid, MBTS, TMT, PBN, China Clay, Carbon Black, Dutrex R and Sulphur. The typical formula which is based on 100 parts of natural rubber is given here and the cost comparison for the products incorporated in the specification given is between 1960 and 1965.

It is evident from the formula that five parts by weight of Zinc Oxide was costing in 1960 Rs.2/- per kg. which has gone up in 1965 to Rs.2.80 and on the basis of the material required i.e the net cost of the material in 1960 was Rs.10/- which has risen to Rs.14/- for 1965 showing an increase of 40%. Similarly on the basis of the same formula Stearic Acid shows an increase of 35% and MBTS 32%. Likewise TMT and PBN show an increase of 33% and 23% respectively, whereas China Clay displays an increase of 100 percent. The cost of Carbon Black which constitute the bulk of the manufacturing cost in the rubber compound with 40 parts by weight was costing Rs.72/- in 1960 and the same has gone up to Rs.98/- in 1965 showing a net increase of Rs.26/- on 40 parts by weight, in other words an increase of 36%. Dutrex R and Sulphur show an increase of 50% and 96% respectively. If you compare the value of total material used in 1960 and 1965, you will find that the difference in cost shows an increase of Rs.54.26 and in terms of percentage shows an increase of 40% on 1960 prices. In other words if a rubber factory is using 1 ton of rubber per month, they are required to spend an additional amount of Rs.540/- per month in 1965 and for a year Rs.6,480/- which is undoubtedly a heavy burden on the small industry with an average consumption of 1 ton of rubber per month and no doubt the same will hold good even in bigger units. If you take an average of Rs. one lakh of turnover for a concern which consumes about 1 ton of rubber per month, the increase in burden is nearly to the extent of 6.5% by virtue of chemicals and

compounding ingredients alone. Since this 6.5% would naturally reflect in the selling price of the finished product, it is my belief that the selling price of mechanical and moulded rubber goods have gone up by 6.5% as a result of the increase in prices of chemicals and compounding ingredients between 1960 and 1965.

If you take into consideration the total amount of rubber consumed wherein chemicals and compounding ingredients ratio will more or less remain the same. The industry as a whole on a consumption of about 100,000 tons of rubber has been paying about Rs.5.4 crores by way of difference in the price level between 1960 and 1965.

If you consider the same formula on the basis of indigenous synthetic rubber or on the basis of Nitrile and Neoprene rubbers which are used for imparting special properties, you would be required to use more of chemicals and compounding ingredients as also the time consumed for mixing purpose which is some what higher than in the case of natural rubber, the additional burden on the industry would be some what more than Rs.540/- per ton. Considering the impact of higher prices of chemicals used in the rubber industry along with increases in other raw material costs such as raw rubber, fabrics, cord, bead wire, etc. the burden on the industry would definitely work out almost to a phenomenal level and I am afraid we have reached a saturation point. The manufacturers of raw materials like the chemicals and compounding ingredients will have to find a reasonable solution to this problem with the active assistance of the industry and the Government, and I trust they would do it sooner so that the industry can adopt a reasonable pricing policy in respect of its finished products.

TYPICAL FORMULA FOR MECHANICAL MOULDED RUBBER GOODS.

Material	Parts by weight in Kg.	Material Cost per Kg.		Total Cost of Material required in the Formula £		Increase in Cost Rs.P. Rs.P.	% of Increase
		1960 Rs.P	1965 Rs.P	1960 Rs.P	1965 Rs.P		
Smoke Sheet RMA-1	100.000	--	--	--	--	--	--
Zinc Oxide	5.000	2.00	2.80	10.00	14.00	4.00	40%
Stearic Acid	2.000	2.80	3.80	5.60	7.60	2.00	35%
Accelerator MBTS	1.250	7.40	9.80	9.25	12.25	3.00	32%
Accelerator TMT	0.250	9.00	15.00	2.25	3.75	1.50	33%
Antioxidant PBN	1.000	7.30	9.00	7.30	9.00	1.70	23%
China Clay	60.000	0.15	0.30	9.00	18.00	9.00	100%
Carbon Black HAF	40.000	1.80	2.45	72.00	98.00	26.00	36%
Dutrex R	15.000	1.00	1.50	15.00	22.50	7.50	50%
Sulphur	2.500	0.38	0.75	0.95	1.87	0.92	96%
	227.000			131.35	186.97	55.62	