

No. RW/NHVI-50 (8)/85

*Dated the 13th May, 1985*

To

The Chief Engineers of All States and Union Territories dealing with Roads

Sub : Hot applied thermoplastic Pavement marking paint "HATPROM"

M/S Recondo Limited, Bombay, have approached this Ministry advocating the use of thermoplastic pavement marking paint, indigenously manufactured by them under the trade name "HATPROM", for use in road markings. The product, backed up by the firm's research and development activities since 1972, is claimed to conform to British Standard 3262 relating to hot-applied thermoplastic road paint and using local materials available within the country. For achieving better reflectivity during night, 8% glass beads are added to the paint during laying operations. The product is stated to conform to the test results (e.g. for softening point, binder content and cone test) stipulated in the British standard and has been devised for Indian climatic and environmental conditions with a laying temperature of 160°C.

The numerous advantages claimed for the thermoplastic paint over the conventional paints are stated as below :

- (i) Longer life (3 years and 1 year for 3 mm and 7 mm thick applications respectively) as compared to the conventional paints currently in use

- (ii) Excellent visibility both during day and night imparted by the constituent transparent beads
- (iii) Quicker drying time
- (iv) Improved skid resistance
- (v) Good abrasion resistance
- (vi) Unaffected by extreme weather/climatic conditions
- (vii) Suitable for bituminous, concrete and metallic surfaces
- (viii) Non-cracking and stability on laying
- (ix) Good bondage to the surface and non-softening at high temperatures
- (x) Low flow resistance and low viscosity for easy application
- (xi) No change in colour due to atmospheric changes.

The material, though costly in the first instance is claimed to be cost effective in the long run due to its longer service life apart from the advantages listed above. As reported, pavement markings using this material laid on trial basis as far back as in 1981 in Bombay city, have stood the rigours of large vehicular traffic and the climatic fluctuations. Pavement markings using this material have also reportedly been provided along National Highways in Nasik and Pune in May/June, 1984 and similar applications are due to be laid in Kolhapur (on Poona-Bombay road) in May, 1985.

The firm are prepared to take up the work of pavement markings on a turnkey basis (inclusive of cost of materials, application, overheads etc.) and have already designed a laying machine which is being used on the jobs executed and those in hand. For augmenting the speed and accuracy of laying operations, the firm are reportedly contemplating acquisition of a sophisticated mechanised applicator from abroad.

In view of the claimed superiority of the thermoplastic pavement marking paint and its potential for wide applicability on Indian Roads for improving road safety and for reducing the incidence of traffic accidents, the suitability, durability and cost-effectiveness of the material is required to be examined in the context of Indian Road, traffic and climatic/environmental conditions before advocating the same for general usage. With this objective in view, you may like to consider giving this material a trial on an experimental basis, monitor its performance and communicate necessary feedback to the Ministry on its suitability and performance characteristics.

For any further information and details regarding this material i.e. its specifications, mode of application, availability, cost etc, you may please contact "Recondo Limited, Cooperative Insurance Building, Sir Phirozshah Mehta Road, Fort, Bombay-400001 (attention Dr. K.S. Moorthy)"