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PPC/BS-Fusion /2017
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Dr. B. Singh
Chief Scientist and Head,
Polymers Plastics & Composites

To,

Sri Yunik Chandna
Director,
Fusion industries Limited
Plot no. 1&4, Block H, NH-2, Opp. F.C.I. Godown
N.I.T. Faridabad-121001

Dear Sri Chandna,

Kindly refer to your letter dated 06/10/2016 regarding evaluation of "Fusion" Brand PPR pipes and fittings for hot and cold water supply. The party has submitted the samples and evaluation charges in response to our letter P.B D/P.P.C D/B S/2016 dated: 02/11/2016.

The institute has undertaken evaluation work related to potability and mechanical properties of PPR pipes. Dimensional details of pipes and fittings are measured according to IS 15801 & DIN 16962 (Part 6-8). Potability evaluation such as overall migration of leachable additives as a function of temperature and storage duration (IS 9845), pH, dissolved solid, turbidity test, total living mortality, microbiological test (IS 10500) has been completed and results are satisfactory. The physico-mechanical properties of pipes such as heat reversion, hydrostatic pressure test, impact test, melt flow index etc. are also carried out. The Thermal stability carried out by TGA, thermal expansion & softening point by DMA and homogeneity of constituents in the micro structure by FE-SEM-EDX gave satisfactory results.

After the completion of test, the results have been analysed for suitability assessment of pipe and fittings. It was found that Fusion" Brand pipes and fittings are suitable for potable hot and cold water supply. The pipes and fittings satisfy the requirements of DIN 8077/8078/16962 and IS: 15801 for dimensions, material properties, performance characteristics, IS:10500 for drinking water and IS 10910 for leachable additives as its safe use for drinking water.

With kindest regards.

Yours sincerely,

B Singh
(Dr. B. Singh)