



INSTITUTE OF CHEMICAL TECHNOLOGY

Campuses - Matunga, Mumbai • IOC Bhubaneswar, Odisha • Marathwada, Jalna

Category I Deemed to be University (MHRD/UGC)

A++ Grade by NAAC (CGPA 3.77)

Elite Status and Centre of Excellence-Govt. of Maharashtra

रसायन तंत्रज्ञान संस्था

Professor (Dr.) S. T. MHASKE

DEAN, Off-Campuses

Professor & HEAD

Department of Polymer and Surface Engineering

Fellow, Maharashtra Academy of Sciences

ICT/PSE/STM/765

Date: June 11, 2024

To,
Aditya Birla Paints
Navi Mumbai - 400703

Subject: Expert Opinion Report.

This is reference to your submitted samples of Product Name as – **Birla Opus Prime B 70 + Prime E70** was characterized as system for various characterizations as per standard tests procedures. Samples were characterized twice to check reproducibility for the outcome. Outcome of the work are tabulated below.

Parameters	Method	Birla Opus Prime B 70 + Prime E70
CO ₂ Diffusion Resistance Coefficient	DIN 1062-6 (2002-10)	7.2*10 ⁵
CO ₂ Diffusion Equivalent Air Layer Thickness (m)	DIN 1062-6 (2002-10)	480
Chloride Ion Diffusion	ASTM C 1202	Zero Penetration in 15 Days
Chloride Ion Diffusion Coefficient	ASTM C 1202	1.05*10 ⁻⁷
Adhesion Strength	ASTM D 4541	3.2 N/mm ² (Substrate failure)
Dry Film Thickness (DFT)	EN ISO 2808	245 μ
Elongation after 7 Days	ASTM D 2370/98	210%
Tensile Strength after 7 Days	ASTM D 2370	3.55 Mpa
Crack Bridging Ability	EN 1062-7	1.9 mm
Water Vapour Permeability (gm/m ² /day)	EN ISO 7783	72

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Note: The results contained in this report are only related the sample characterized from corresponding batch. This report is intended only for your guidance and not valid for legal purpose or advertisement. This report shall not be reproduced except in full without written approval of this institution.

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