



# INSTITUTE OF CHEMICAL TECHNOLOGY

रसायन तंत्रज्ञान संस्था

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

**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 90 + One True Vision** 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 90 + One True Vision
CO <sub>2</sub> Diffusion Resistance Coefficient	DIN 1062-6 (2002-10)	1.1*10 <sup>7</sup>
CO <sub>2</sub> Diffusion Equivalent Air Layer Thickness (m)	DIN 1062-6 (2002-10)	650
Chloride Ion Diffusion	ASTM C 1202	Zero Penetration in 15 Days
Chloride Ion Diffusion Coefficient	ASTM C 1202	1.05*10 <sup>-7</sup>
Adhesion Strength	ASTM D 4541	3.7 N/mm <sup>2</sup> (Substrate failure)
Dry Film Thickness (DFT)	EN ISO 2808	242 μ
Elongation after 7 Days	ASTM D 2370/98	437%
Tensile Strength after 7 Days	ASTM D 2370	2.8 Mpa
Crack Bridging Ability	EN 1062-7	3.9 mm
Water Vapour Permeability (gm/m <sup>2</sup> /day)	EN ISO 7783	71

**Professor (Dr.) S. T. Mhaske**  
Professor & Head  
Dept. of Polymer & Surface Engg.  
Institute of Chemical Technology, (ICT)  
Matunga, Mumbai – 400019

**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.

## ICT MUMBAI

Nathalal Parekh Marg, Matunga, Mumbai - 400 019, India  
Tel.: +91-22-3361-2412 (D), Website : www.icmumbai.edu.in  
Email : st.mhaske@icmumbai.edu.in, stmhaske@gmail.com  
GSTIN : 27AAAT14951J1ZG

## ICT IOC, BHUBANESWAR

ICT-IOC Odisha Centre, Indian Institute of Technology,  
Kharagpur Extension Centre, Near Hotel Swosti Premium,  
Mouza-Samanpur, Bhubaneswar - 13. Tel.: 0674-2651700  
GSTIN : 21AAAT14951J1ZS

## ICT MARATHWADA, JALNA

M/s Beej Sheetal Innovations Centre Private Limited,  
BT-6/7, Biotechnology Park, Additional MIDC Area,  
Aurangabad Road, Jalna - 431 203. Tel.: 7378468193  
GSTIN : 27AAAT14951J1ZG