



TECHNICAL DATA SHEET

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PRODUCT	AQUA-TECH FR-K FIRE RETARDANT WATER BASED PAINT																								
DESCRIPTION	Water Based Fire Retardant Topcoat Matte Paint system. It is a fire-resistant water-based paint that complies with the EN 13501-1:2018 standard (Classification: B-s1,d0) and TS EN 13823:2020+A1:2022 criteria (corresponds to B1 class in DIN 4102).																								
COLOR	Additional colors can be made other than water depending on batch size																								
APPLICATION FIELDS	<p>It can be applied to the surfaces of all structural elements, especially wooden, concrete, prefabricated, plasterboard wall partitions and steel surfaces, as well as the walls and ceilings of public use areas such as schools, hospitals, hotels, restaurants, gyms, cinemas, etc., where fire resistance is required.</p> <p>Depending on the place of use, if used on frequently touched surfaces, it is recommended to finish it with a thin coat of Aqua-Tech Water Based Varnish (015/035-series)* to provide extra slip and water resistance (to ensure ease of cleaning). It does not require additional coat application when painting high-rise structural elements (air ducts, etc.) such as ceilings.</p> <p>*:At the same time, the final gloss can be partially increased by choosing different matte version of varnish.</p>																								
PROPERTIES	<p>According to TS EN 13823 (highest standards of fire safety), it has high burning resistance, is flame retardant and does not produce smoke and droplets in first 10 minutes;</p> <p>Flame Retardant; It does not create heat and does not spread within 10 minutes. There will be no Lateral Flame Spread for 20 minutes.</p> <p>No Smoke Producton; The smoke produced in 10 minutes is minimal and does not grow.</p> <p>No Fire Droplets; It does not create flame droplets that cause the flame to spread within 10 minutes.</p> <p>Not required primer Fast drying</p>																								
THECNICAL PROPERTIES	<table><tr><td>Viscosity (S4; 30 rpm, 20°C)</td><td>.....</td><td>9220±75 mPas</td></tr><tr><td>Viscosity (S4; 60 rpm, 20°C)</td><td>.....</td><td>5500±50 mPas</td></tr><tr><td>Solid Content (%)</td><td>.....</td><td>67±1</td></tr><tr><td>Density (g/cm³; 20°C)</td><td>.....</td><td>1,345±0,05</td></tr><tr><td>Application Viscosity (D4/20°C)</td><td>.....</td><td>25-30"</td></tr><tr><td>Dust Dry (20°C, %50 humidity)</td><td>.....</td><td>20 - 25 min</td></tr><tr><td>Touch Dry (20°C, %50 humidity)</td><td>.....</td><td>2 hr</td></tr><tr><td>Complete Dry (20°C, %50 humidity)</td><td>.....</td><td>48 hr</td></tr></table> <p><i>Note: Drying times depend on ambient temperature and humidity. It should be taken into account that the time will be extended at low temperature and high humidity.</i></p>	Viscosity (S4; 30 rpm, 20°C)	9220±75 mPas	Viscosity (S4; 60 rpm, 20°C)	5500±50 mPas	Solid Content (%)	67±1	Density (g/cm ³ ; 20°C)	1,345±0,05	Application Viscosity (D4/20°C)	25-30"	Dust Dry (20°C, %50 humidity)	20 - 25 min	Touch Dry (20°C, %50 humidity)	2 hr	Complete Dry (20°C, %50 humidity)	48 hr
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DILUTION RATIO	<p>During the application, Aquat-Tech FR-K Water Based paint is applied by diluting with 30% water for spray</p> <p>Important: Before dilution, it should be stirred well, then for adjusting application viscosity, required amount (according to information which is given in dilution ratio) water is added by mixing. Make sure a homogenous mixture is obtained before application. Products should be dilutes as much as required. Products that long term pre-diluted can loose their homogeneity and cause out of specifications, accordingly.</p>																								
APPLICATION METHOD :																									
<p>Preperation and precautions: Before application, the products are thoroughly mixed in the package and made homogeneous and then diluted as needed. The temperature of the application environment and surface should not be below 15°C and application should not be done on high humid surfaces.</p> <p>Depending on the air temperature, the area should be painted so that the second coat can be applied without missing the dust drying time (20-25 minutes at 20°C). It should be taken into consideration that sanding will be required if the overcoat application times are delayed.</p> <p>Application: A total of 4 coats with 25-30 minute intervals, it's applied as 250g/m² (WFT: 150-170µ) on each layer by spraying on properly sanded, clean, dry and dust-free surfaces (according to the regulation, it is mandatory to have fire retardant surfaces, ie. MDF must be Bs2d0 certified). When it dries completely DFT: 95-100 µ in each layer, a total of 450±50 µ dry film is obtained in 4 layery. To provide extra slip and water resistance, it should be finished with the application of 035-XXXX Aqua Tech Water Based Varnish.</p> <p>Spreading rate depends on the type of application, approximately 1m² can be cover per layer with 1 kg (without waste).</p> <p>Varnish Application: In order to provide extra slip and water resistance, 035-XXXX Aqua Tech Water Based Varnish is applied by spraying at 50-55g/m² (WFT:50-55µ) on clean, dry and dust-free Aqua Tech FR-K Water Based Painted surfaces as described above (DFT: 15±5 µ dry film is obtained).</p> <p>Spreading rate depends on the type of application, approximately 18-20 m² can be cover per layer with 1kg (without waste).</p>																									
STORAGE: Products will remain stable for at least 12 months when stored in its original pack in a dry place at storage temperatures between 5-35 °C. It's recommended to read SDS before applications.																									

Important Note: This information is based on our present state of knowledge and is intended to provide general notes on Kubilay Products and their uses. However without guarantee as conditions and methods of end users are beyond our control. We recommend that end users determine the suitability of the materials before adapting them on a commercial scale.