



KCC FIREMASK SQ476 is one component solvent based acrylic thin film fire Protection coating system which has to be used for structural steelwork.

FIREMASK SQ476 has been tested, assessed and gotten certifiere certification with BS476 Part 20,21 from 15 minutes up to 120 minutes for various section factors.

Recommended use	Middle coat in fire-proofing coating system to provide fire protection for steel structures of building or plants.(Interior use only)
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Physical Properties

Finish and Color	White, Matt
Specific gravity	Approx. 1.3
Solids by volume	65%
Flash point	32 °C (hermetically)

Application details

Surface preparation	<p>* All surface to be coated should be clean, dry and free from dust, oil and grease, other contaminants.</p> <p>* Prior to paint application all surfaces should be assessed and treated in accordance with ISO 8504:2000.</p> <p>- Blast cleaning : SSPC-SP10 or Sa2½ (ISO 8501-1:2007)</p>
Preceding coat	<p>Selected primers or priming systems must have completed the primer qualification procedure from KCC and feature on KCC paint published primer list.</p> <p>Two component Epoxy : KCC Korepox Primer EP170</p> <p>※ For further information, please consult the Technical Department.</p>
Method of application	<p>Brush</p> <p>Recommended for small areas, care must be taken to achieve the specified dry film thickness.</p> <p>Airless spray</p> <p>Tip range : 0.027 ~ 0.033 inch</p> <p>Output fluid pressure : 1,800 ~ 2,200 psi / 120 ~ 150 atm.</p> <p>Fan : 30°~ 60°</p> <p>(Airless spray data are indicative and subject to adjustment.)</p> <p>※ If use Tip less than 0.027inch it may cause trouble.</p>
Mixing	<p>Single pack</p> <p>This material should always be mixed thorough with a power agitator before application.</p>
Thinning	<p>If necessary, dilute with thinner 002(summer season),003(winter season) is recommended.(use Maximum 1% by volume)</p> <p>Apply after mixing for 5min. with power agitator.</p>

Substrate	Carbon steel									
Application conditions	<p>The surface must be completely clean and dry.</p> <p>Do not apply when relative humidity is above 85% .</p> <p>The surface temperatures must be at least 3°C above dew point to prevent condensation.</p> <p>Object temperature not below 5°C, to max. 35°C.</p>									
Drying time	<table border="1"> <thead> <tr> <th>Object Temperature</th> <th>10 °C</th> <th>25 °C</th> </tr> </thead> <tbody> <tr> <td>Set to touch</td> <td>3 h</td> <td>1 h</td> </tr> <tr> <td>Dry hard</td> <td>48 h</td> <td>24 h</td> </tr> </tbody> </table> <p>※ All drying times have been measured at a wet film thickness of 1,000µm.</p> <p>※ The actual drying time is dependent upon a number of factors including: Temperature, Air movement, Humidity, Method of application, Thickness of coating, etc.</p>	Object Temperature	10 °C	25 °C	Set to touch	3 h	1 h	Dry hard	48 h	24 h
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Subsequent Coat	<p>Two component polyurethane : KCC KORETAN Topcoat UT6581</p> <p>Top coat must be applied after 3 days(in summer) and 7 days (in winter) of the last mid-coat spray.</p> <p>※ Dry film thickness must be checked to ensure that specified thickness has been achieved before any top coat is applied.</p>									
Recoating interval	<p>At 25°C below 85% relative Humidity, under well-ventilated condition Minimum : 24 hours</p> <p>In highly humid or low temperature conditions(ex. In heavy rain), recoating interval can be extended as delayed period.</p>									
Film Thickness per coat	<p>Typical recommend wet film thickness is 1,000 µm.</p> <p>※ Applying too thick at one time(wet 1,300µm ↑) may cause crack, poor adhesion, and delay of drying speed. (Do not exceed 1,300µm wet film thickness per coat.)</p> <p>※ All steel sections must be coated with correct film thickness to achieve the required fire rating.</p> <p>※ Final Dry film thickness should not exceed over 30% specified thickness.</p>									
Cleaning solvent	<p>KCC 002, 003 thinner</p> <p>Clean all equipment immediately after use with KCC 002, 003.</p>									

Storage and package	
Shelf life	18 months at 25°C
Storage	<p>Recommended storage conditions are between 5°C and 35°C .</p> <p>Store in dry, shaded conditions away from sources of heat and ignition.</p>
Packing Unit	18L
Remarks	

Handling	This product is intended for use only by professional applicators in industrial.
Precautions	<p>Safety Data Sheet(MSDS) and the container(s), and should not be used without reference to the MSDS which KCC has provided to its customers.</p> <p>All work involving the application and use of this product should be performed compliance with all relevant national Health, Safety & Environmental standards and regulations.</p> <p>In the event welding or flame cutting is performed on metal coated with this product, dust and fumes will be emitted which will require the use of appropriate personal protective equipment and adequate local exhaust ventilation.</p>
Note	<p>Intended use : Only structural steel</p> <p>In case of outdoor application, be prepare covering material for rain or snow Avoid the cause of fire and direct sunlight during storage. Protect skin and eyes, and avoid prolonged breathing of other solvent vapors. Use with adequate ventilation. Respiratory protection is recommended when applying in confined spaces or stagnant air. Keep containers closed when not in use. Keep coating utensils after washing several times with thinner. Store out of children's reach.</p>
1'st issue	2018-05-03
Revision	

Disclaimer : The information in this data sheet is believed to the best of our knowledge based on laboratory test and practical experience. However, there are many factors affecting the performance of product and the product quality itself, so we are not able to guarantee without the confirmation of the purpose of using the product from us in writing. We reserve the right to change the data without notice and you should check that this data sheet is current prior to using the product.

