

KERAGUARD ADG20

Polyurethane UV Resistant Coating



DESCRIPTION

KERAGUARD ADG20 is a high abrasion resistant, aliphatic, pigmented polyurethane coating. It is specifically designed for areas that are subject to repetitive, high abrasive traffic such as loading docks and aisleways. Being based on non-yellowing prepolymers KERAGUARD ADG20 is UV resistant and will not yellow, chalk or degrade over time even when exposed to harsh conditions.



USE

Suited for high traffic productions areas, show room floors, aircraft hangars, warehouses and other places where physical and chemical resistance combined with light stability are important.



ADVANTAGES

- UV and Chemical Resistant
- Good use for iron and steel surface
- Non-Toxic, easy to apply, low maintenance cost
- Resistant to Micro-Organism Growth
- High Adhesion Strength



STORAGE

12 months from date of manufacture, when be stored correctly in original packaging, avoid sunshine, temperature from 20°C - 40°C



PACKAGING

KERAGUARD ADG20 is supplied in 18kg per set



COVERAGE

For estimating the quantity of materials required uses the following:

100µm : 0.15kg/m²

200µm : 0.30kg/m²

PRODUCT PROPERTIES

Service Temperatures		- 20°C to 80°C
Min Thickness/Coat		50µm
Min Recoat Time		7 hours
Surface drying time (ASTM D1640-14)		≤ 6 hours
Bond strength (ASTM D4541)		≥ 2.0 Mpa
Abrasion strength (JIS K5600-5-8:1999)		≤ 65 mg
Impact Strength (ISO 6272-2:2011)		≤ 50 kG.cm
Concentration of organic compounds evaporation (VOC) (ISO 11890-1:2007)		≤ 55%
Resitant to weather accelera- tion, after exposure 300 hours		ISO 16474-3:2013
Appearance of coating	The coating surface no blister, crack, peeling, chalking and has no significant change in color	
Glos retention rate	97%	

Chemical resistance (According to the detailed chemical resistance)

Service temperature: -20°C – 80°C

Discontinuous in 7 days: 60°C

Discontinuous in 12 hours: 80°C

APPLICATION METHOD



Concrete conditions

Concrete surface must be smoothed and flattened, concrete must be solid with compressive strength of 25N/ mm² and the tensile strength should be minimum 1.5N/ mm². The concrete shall be designed with moisture resistant system or withstand reverse osmosis.



Preparation

KERAGUARD ADG20 must be applied to a clean surface. These should be removed by specialized chemical and then followed by mechanical preparation. Uneven floors or damaged areas should first be by leveled by using a suitable repair material such as KERACRETE RM120 or KERACRETE NS50. The moisture content in the substrate should be less than 6% when measured by suitable moisture meter.



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Limitations

In order to achieve homogeneous color, should be used the same batch of production in one area.



Note on application:

- Substrate moisture content < 6%
- Min. substrate temperature +15°C
- Max. substrate temperature +39°C
- Substrate temperature must be at least 3°C above dew point
- Maximum relative air humidity 85%



Mixing

KERAGUARD ADG20 is supplied with part A and part B. Mixing should be carried out using a slow speed mixer, no more than 600 rpm with a suitable mixing paddle. Mix the part A for 2-3 minutes to reconstitute any settlement from storage. Add the part B to part A and mix a further 2-3 minutes until homogenous.

Note: Once this material is mixed it can't be resealed for later use.



Application

For application by short hair roller, apply evenly the mixed KERAGUARD ADG20 on to the prepared substrate and roller out until the desired coverage rate is achieved.

For application by airless spray a single line piston pump with a 20:1 ratio may be used, using a 0.015inch tungsten nozzle tip. For best results add up to 5% APT Spraying Thinners to aid spray application.

CURING

Temp	Walking	Light Traffic	Full Traffic
+10°C	24 h	3 days	10 days
+20°C	18 h	2 days	7 days
+30°C	12 h	1 day	5 days

CLEANING EQUIPMENT



Clean equipment and tools immediately after use by Solvent.

SAFETY PRECAUTIONS



The product's components have been formulated to optimize physical characteristics such as strength and chemical resistance while minimizing hazardous physical and health factors encountered during application. A concerted effort is made to be aware of the latest chemical toxicological information and to apply this knowledge in a responsible manner to ensure product safety. Please wear respirator when necessary.

During application of APT product, always wear gloves and appropriate work clothing to minimize contact. Ventilation is required with special consideration for enclosed or confined areas. Air movement must be designed to insure turnover at all locations in work area and adjacent areas to avoid buildup of heavy vapors. Use caution when handling flammable liquids in work area and containers with residues. Observe safe storage practices by separating resins from hardeners, by keeping solvents in a cool area, free of sources of ignition. Product Material Safety Data Sheets are available and should be consulted when handling products. These products are for industrial and professional use only; application directions must be followed.

