STONHARD

STONSEAL® PA7

PRODUCT DESCRIPTION

Stonseal PA7 is a two-component, high performance, pigmented aspartic polyurethane coating. Stonseal PA7 combines superior chemical and abrasion resistance with excellent adhesion and weatherability.

USES, APPLICATIONS

Stonseal PA7 is a general service urethane coating designed to improve cleanability, increase stain resistance and abrasion resistance, and improve UV resistance. It may be applied to vertical and horizontal surfaces.

PACKAGING

Stonseal PA7 is packaged in units for easy handling. Each unit consists of:

I carton containing:

- 2 foil bags of Isocyanate
- (2) I gallon can of Amine

COVERAGE

Approximately 200 sq. ft./18.5 sq. m per unit at 4 mil thickness over a porous substrate (unsealed concrete, uncoated mortar systems, etc.).

Approximately 400 sq. ft./37 sq. m per unit at 4 mil thickness over a sealed substrate (primed concrete, coated mortar system, etc.)

STORAGE CONDITIONS

Store both components of Stonseal PA7 between 60 to 85°F/16°C to 30°C in a dry area. Avoid excessive heat. Do not freeze. The shelf life is one year in the original, unopened container:

COLOR

Stonseal PA7 is available in a pigmented high gloss finish. There are numerous standard colors available as well as custom colors.

SURFACE PREPARATION

Preparing Stonhard Floor Systems

Before coating a Stonhard floor, the surface must be clean and dry. If applying Stonseal PA7 over an epoxy coating, it is important to allow the epoxy to cure for at least 12 hours at 77°F/25°C. The surface must then be clean and free of dust and bond inhibiting particles. The Stonhard floor is now ready to be coated.

PHYSICAL CHARACTERISTICS

VOC Content (ASTM D-2369) .	94 g/l
Pot Life @ 77°F/25°C	20 minutes
Cure Rate @ 77°F/25°C	3 hours
	for a tack-free surface
	24 hours
	for normal operations
Abrasion Resistance	0.08 gm max. weight loss

Note: The above physical properties were measured in accordance with the referenced standards.

PRIMING

No primer is necessary for use over sealed Stonhard floor systems. An initial primer layer consisting of an epoxy coating or 2 coats of Stonseal PA7 will be required over an unsealed mortar or porous substrate.

MIXING

Stonseal PA7 is supplied in factory proportioned quantities. To achieve thorough and proper mixing, the Stonseal PA7 must be mechanically mixed using a heavy-duty, slow-speed drill (400 to 600 rpm) with a mixing blade. Empty the contents of the amine and isocyanate into a clean mixing container. Using a mixing blade, mix the material for I to 2 minutes. Avoid high-speed mixing that will entrain air into the mix. Thorough mixing of the two components is required.

POT LIFE

After mixing, Stonseal PA7 has a working time of approximately 20 minutes at 77°F/25°C. The working time may vary depending upon ambient and surface conditions. At high humidity levels, working time will be substantially decreased.

APPLYING

Stonseal PA7 can be applied at ambient temperatures of 60 to 85°F/16 to 29°C and humidity below 80%. The material must be applied immediately after mixing the 2 components. Stonseal PA7

is applied with a rubber squeegee and medium nap roller. The roller is used to remove squeegee lines and smooth out the surface. A brush may be used where necessary. Any questions regarding the application of Stonseal PA7 should be directed to Stonhard's Technical Service Department.

HIGH HUMIDITY APPLICATIONS

It is common to have installation difficulties when applying Stonseal PA7 under high humidity conditions. The working time of the Stonseal PA7 is inversely related to the relative humidity level. Under these conditions, the working time of the material is greatly reduced as the excessive moisture present in the atmosphere accelerates the cure.

To slow down the cure rate, limit the amount of moisture coming in contact with the material. It is common practice, once materials are mixed, pour the entire bucket onto the floor. Though this is advantageous when working with epoxies, it is potentially detrimental when working with these unique urethanes. Increase the open time by pouring only a portion of the material onto the floor while leaving the rest in the bucket until it is ready to be applied. This limits the amount of material being exposed to the moisture in the air at one time. The cure rate of these urethane materials is not accelerated when sitting in the bucket, unlike epoxy materials. Also, NEVER mix multiple mixes at once; only mix one mix at a time!

Low humidity will affect this product in the opposite way. When the humidity is low, it is not unusual for the undercoat to take more than 4 hours to cure. It may even stay slightly soft for up to 12 hours. This will not affect the overall performance of the finished system. As the material cures the physical properties will develop to their full potential.

CURING

The surface of Stonseal PA7 will be tack-free in 3 hours at 77°F/25°C. The coated area may be put back into service in 24 hours. Ultimate physical characteristics will be achieved in 7 days.

RECOMMENDATIONS

- Apply only on a clean, sound and properly prepared substrate.
- Minimum ambient and surface temperatures are 60°F/16°C at the time of application.
- Do not use water or steam in the vicinity of the application.
 Moisture can seriously affect the working time and properties of the material.
- Application and curing times are dependent upon ambient and surface conditions.

PRECAUTIONS

- Acetone is recommended for cleanup of the unreacted Stonseal PA7 material. Use these materials only in strict accordance with the manufacturer's recommended safety procedures. Dispose of waste materials in accordance with government regulations. The reacted material will require mechanical means of removal.
- The selection of proper protective clothing and equipment will significantly reduce the risk of injury. Body covering apparel, safety goggles or safety glasses and impermeable gloves are required.
- In case of contact, flush the area with copious amounts of water for 15 minutes and seek medical attention. Wash skin with soap and water.
- Use only with adequate ventilation.

NOTES

- Procedures for maintenance of the flooring system during operations are described in the Stonkleen Floor Cleaning Procedures Brochure.
- For environments not referenced in the Chemical Resistance Guide, consult Stonhard's Technical Service Department for recommendations.
- Safety Data Sheets for Stonseal PA7 are available online at www.stonhard.com under Products or upon request.
- A staff of technical service engineers is available to assist with product application or to answer questions related to Stonhard's products.
- Requests for technical literature or service can be made through local sales representatives or corporate offices located worldwide.
- The appearance of all floor, wall and lining systems will change over time due to normal wear, abrasion, traffic and cleaning.
 Generally, high gloss coatings are subject to a reduction in gloss, while matte finish coatings can increase in gloss level under normal operating conditions.
- Surface texture of resinous flooring surfaces can change over time as a result of wear and surface contaminants. Surfaces should be cleaned regularly and deep cleaned periodically to ensure no contaminant buildup occurs. Surfaces should be periodically inspected to ensure they are performing as expected and may require traction-enhancing maintenance to ensure they continue to meet expectations for the particular area and conditions of use.

CHEMICAL RESISTANCE GUIDE

The purpose of this guide is to aid in determining the potential value of Stonseal PA7 when exposed to the damaging effects of corrosive chemical environments.

RATING CODE

E - Excellent

G - Good

NR - Not Recommended

OS - Suitable for use where "occasional spillages" occur, when flushing with water immediately follows.

ACIDS

RATING	RATING
Acetic - 5% G Acetic - 20% OS Acetic - Glacial NR Benzoic - Sat. 3% E Boric - Sat. 30% E Butyric - 10% OS Chromic - 10% G Chromic - 20% OS Citric - 50% E Cresylic OS Diglycolic G Fatty G Fluoboric G	RATING Hypochlorous - 5% E Lactic - up to 20% OS Maleic - 30% OS Maleic - 40% OS Nitric - 10% G Nitric - 30% OS Oleic G Oxalic - Sat E Perchloric - 35% OS Phosphoric - up to 50% OS Picric - Sat E Phthalic G Succinic - Sat E Sulfuric - 20% E
Formic - up to 10%	

ALKALIES AND SALTS

Stonseal PA7 is rated Good to Excellent when exposed to most alkalies and salts.

SOLVENTS AND OTHER CHEMICALS

RATING	RATING
Acetone NR	Linseed Oil
Alcohol (Methyl)	Methyl Ethyl Ketone
Alcohol (Ethyl, Propyl, Isopropyl, Butyl)	Methylene ChlorideNR
Benzene OS	Milk
Carbon Tetrachloride	Mineral SpiritsG
Corn Oil E	Naphtha OS
CyclohexaneOS	Oils - Cutting G
Denatured Alcohol	Oils - Mineral E
Ethylene GlycolG	Oils - VegetableG
Ether OS	Perchloroethylene
Formaldehyde OS	SkydrolG
Gasoline	Sucrose - Sat. (Sugar) E
Glycerine	TolueneOS
Hydrogen Peroxide - 10% NR	TrichloroethyleneNR
JP5 Jet FuelG	UreaG
Juices - Fruit	Vinegar (Household)
Juices - Vegetable	Water E
Lard G	XyleneOS

Note: This data is based on laboratory tests performed under carefully controlled conditions. (All solutions are at ambient temperatures.) No warranty can be expressed nor implied regarding the accuracy of this information as it will apply to actual plant operation or job site use. Plant operations and job site uses vary widely, and the individual results obtained are affected by the specific conditions encountered, which are beyond our control.

IMPORTANT: Stonhard believes the information contained here to be true and accurate as of the date of publication. Stonhard makes no warranty, expressed or implied, based on this literature and assumes no responsibility for consequential or incidental damages in the use of the systems described, including any warranty of merchantability or fitness. Information contained here is for evaluation only. We further reserve the right to modify and change products or literature at any time and without prior notice. **TONHARD** **STONHARD** **Www.stonhard.com**

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