# Isotec International Inc



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# TECHNICAL DATA SHEET

# IsoCoat HRN 5502 HB

IsoCoat HRN 5502 HB is a 100% solids, state-of-the-art, VOC-free, plural-component, polyurea hybrid elastomeric membrane. This seamless system exhibits excellent performance characteristics. This membrane achieves an extremely tough, flexible, chemical and abuse resistant finish for a wide range of applications.

#### APPLICATIONS

- Aggressive, non-slip performance applications
- Casting material for material handling (chutes, hoppers, rollers)
- Chemical resistance
- · Commercial trucks and cargo trailers
- Containment
- Explosive detonation chambers
- Flooring, walkways and stairs
- Military tanks and vehicles
- Mining Aggregates
- · Skid resistant truck beds
- · Sound deadening applications
- Tank Linings
- Transportation
- · Truck Bed liners
- Truck lift gates
- Vibration absorption applications
- Waterproofing

## PRODUCT ADVANTAGES

- Can be top coated for UV or chemical resistance
- Corrosion resistance
- Excellent abrasion resistance
- Excellent impact strength
- excellent weather resistance
- Fast cure; can be handled/walked on in minutes
- Good chemical resistance
- Higher Elongation & Greater Flexibility
- No VOC's
- Reduces noise from vibration and impact
- Resistant to thermal shock
- Seamless & can be applied at any thickness
- Slower reactivity & better substrate wetting
- Smooth Finish

\*Values given are not intended to be used in specific preparation

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<b>Component Properties</b>	
Color - ISO	Cream
Color - POL	Black, amber
Viscosity - ASTM D-2196 - 74°F, ISO	1000 - 2000 cps
Viscosity - ASTM D-2196 - 74°F, POL	400 - 800 cps
% Solids - by Weight	100 -
% Solids - by Volume	100 -
Weight per gallon - ISO	9.4
Weight per gallon - POL	8.4
Reactivity Profile	
Ratio by Weight - ISO:POL	1.12 - 1
Ratio by Volume - ISO:POL	1 - 1
Gel Time - 100 gram sample, 74°F	10 - 15 Seconds
Tack Free Time - 100 gram sample, 74°F	20 - 25 Seconds
Sprayed Gel Time	6 - 8 Seconds
Sprayed Tack Free Time	11 - 12 Seconds
Full Cure	24 Hours
Return to Service - Foot Traffic	1 Hour
Typical Physical Properties	
Hardness - ASTM D2240 - Shore A	90 Shore A
Hardness - ASTM D2240 - Shore D	39 Shore D
Tear Strength - ASTM D624, Die C	270 pli
Tensile Modulus - ASTM D412	6900 psi
Tensile Modulus - ASTM D412 - 100%	1550 psi
Tensile Strength - ASTM D412	1900 psi
Elongation - ASTM D412	150 %
Abrasion Resistance - ASTM D4060 - 1000 gram load, 1000 revolutions, CS-17 wheels	110 mg

## RECOMMENDED HANDLING INSTRUCTIONS

Always mix/roll Iso and Poly side prior to use to ensure a homogenous product before use.

Heated Plural Component Equipment, in 1:1 ratio only, such as:

Graco HXP-2 with Fusion Air Purge gun and AR2929 mix module sprayed at 2000 psi static and 150° F at the gun.

A dual cartridge can also be used to apply the material at ambient conditions, in addition to pneumatic cartridge spray. Reactivity will thus be slower due to the reduced temperature compared to typical spray gun conditions. Pressure recommendation for cartridge spray is 100 psi.

When finishing application of coating the next day:

Lightly abrade the sprayed surface to remove gloss. Remove dust and clean surface with a solvent such as acetone or isopropyl alcohol. Allow solvent to dry for 30 minutes before spraying the coating. Do not spray past the area that has been prepared.

### **STORAGE**

This product must be stored in tightly closed containers and protected from contamination with moisture and foreign materials, which can adversely affect processing. IsoCoat HRN 5502 HB Iso will react with water to form ureas and carbon dioxide gas, which may cause sealed containers to expand and rupture. IsoCoat HRN 5502 HB Pol is hygroscopic and if not kept in a tightly closed container protected from moisture, it can cause the final product that is sprayed to be foamy in appearance. Partially filled containers should be blanketed with dry nitrogen after use.

Storage temperatures should be maintained between 20° to 35°C (68° to 95°F) for IsoCoat HRN 5502 HB Iso. The Iso must not be allowed to freeze. Exposure to temperatures less than 20°C (68°F), even for short periods of time, can result in the formation of solid material in the Iso. IsoCoat HRN 5502 HB Pol can be stored between 20° to 48°C (68° to 120°F) while not in use.

### **SAFETY**

- -Refer to the product SDS for all relevant safety information.
- -Use only in well-ventilated areas.
- -Wear chemically resistant rubber gloves, safety glasses, and an apron.
- -Avoid prolonged or repeated contact with skin.
- -In case of skin contact, wipe affected area with isopropyl alcohol, followed by soap and water.
- -In case of eye contact, flush eyes with water for 15 minutes and consult a physician.
- -If swallowed or comes into contact with eyes, seek medical attention immediately.

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Since Seller exercises no control over Buyers application or use of the product manufactured by Seller ("product") and since materials used with the product may vary, it is understood that:

- THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTIES OR MECHANTABILITY OR FOR ANY PARTICULAR PURPOSE. While all data presented in Seller's technical data sheet is based on the best information available to Seller and believed correct, such data is not to be construed as a warranty that the product will conform to such specifications. Such technical data sheets are subject to change without notice. Reported laboratory test results of fire redundancy in no way relates to the actual performance under fire conditions. Since all urethane systems are organic, they will burn.
- Reported laboratory test results of the color stability in no way relates to the actual performance upon exposure to light sources. Since all aromatic urethanes experience color degradation upon ultraviolet light exposure, Seller shall not be liable for any damages resulting from ultraviolet light color degradation of any aromatic urethane systems manufactured or sold by Seller.
- The liability of the Seller shall not exceed the purchase price and the Buyer shall not be entitled to nor the Seller be liable for any consequential, incidental, indirect or special damages resulting in any manner from the furnishing of the product.

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