



## Rhino Duraspray Technical Data Sheet

Part A – Isocyanate  
Part B – Resin

Date Issued: 14-July-2005  
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### PRODUCT TYPE:

Elastomeric polyurethane. 100% solids (no VOCs, no solvents).  
(Variations: can be pigmented with limited colours)

### GENERAL PROPERTIES:

Rhino Duraspray is a commercial grade two-component, 100% solids (no VOCs, no solvents), exothermic, rapid curing, elastomeric polyurethane lining system.

- Lining thickness varies based on application, typically minimum of 1.5mm up to unlimited thickness.
- High tensile strength and tear strength properties.
- Very good abrasion resistance. Not recommended where higher impact resistance is required.
- Good chemical resistance.
- Excellent corrosion resistance.
- Good noise reduction.

### RECOMMENDED USES:

- Excellent general purpose industrial lining for applications such as:
  - Material delivery systems where a seamless flexible system is essential.
  - Floor and wall protection in industries such as food processing, food storage, veterinary, production area and laboratories.
  - Secondary containment-as a monolithic, impermeable lining for industrial plant, agriculture, and petrochemical applications. Excellent when used with Geotextile substrates
- Spray-on application creates a monolithic, seamless lining, which conforms to any shape and size.
- Elastomeric properties allow for application to surfaces subject to: vibration, expansion, contraction, movement,
- Casting material for material handling equipment such as Chutes, Hoppers, rollers, etc.
- Bonds to virtually all substrates of any dimension, including metals, woods, concrete, brick and fiberglass.
- Can withstand vehicle forklift traffic and heavy loads with proper thickness build.
- Reduces noise from vibration and impact.
- Stable from -40° C to 79.4° C.
- Aggressive slip resistance performance can be achieved with aggregate integrated into lining.

### NOT RECOMMENDED FOR:

- Sustained temperatures below -40° C or above 79.4° C.
- Application to high density polyethylene or thermo plastics.
- Higher impact resistance locations.

### CHEMICAL RESISTANCE:

Good resistance to many commercial and industrial chemicals such as acids, alkali's, oils and cleaning chemicals.

For specific applications and information, please consult with a Rhino Linings® representative.

### SUBSTRATES:

Metals, wood, concrete, brick, fiberglass, and geotextiles.

### VOLATILE ORGANIC CONTENT:

None. 100% solids. No solvents.

### DRY FILM THICKNESS RANGE:

Varies based on application, typically used at a minimum of 1.5 mm to unlimited thickness.  
Factory Floor Coating Thickness: 3mm to unlimited. (eg forklifts and trucks).  
Bunding Coating Thickness: 2mm to unlimited. (eg sub-station bunds, foot traffic only)

### SHELF LIFE:

Part A - Isocyanate: Nine months, unopened. 75kg and 250kg Drums.  
Part B - Resin: Nine months, unopened. 62kg and 204kg Drums.  
In colder environments the chemical components should be pre-heated. Stir B-side before use.

### BASE MATERIAL COLORS:

Isocyanate - amber/dark brown.  
Resin - pale/opaque.

### COLOR OPTIONS:

Standard color - black or grey.  
Custom dark colors only available by special order.

## Data Sheet

### TYPICAL PHYSICAL PROPERTIES OF Rhino Duraspray

Hardness (Shore A)	95±5	ASTM D-2240
Tensile Strength (psi)*	2100 – 2200	ASTM D-412
Elongation (%)*	60 – 80	ASTM D-412
Flexural Modulus (psi)	2400 – 2800	ASTM D-790
Taber Abrasion Resistance (mg of loss/1000 cycles)		
H18 Wheel; 1000 grams weight	20 – 25	ASTM D-4060
Tear Resistance (pli)* Die C	200 – 250	ASTM D-624
Ross Flex (% crack growth per 50,000 cycles)	0	ASTM FIA-308
Specific Gravity (grams/cc)	1.06 – 1.08	ASTM D-792
Water Absorption (%)	<1.5	ASTM D-570
Dielectric Strength (volts/mil)	300	ASTM D-149
Volume Resistancy (ohm/inches)	6 X 10 (12)	ASTM D-257
Dielectric Constant (MHz)	5.4	ASTM D-150
Dissipation Factor (MHz)	0.058 A	ASTM D-150

\*Properties were checked of Rhino Duraspray polyurethane lining 3.18 mm thick stock.

### REACTIVITY: (Tested in cups, 161g combined @ 25 deg C)

Initiation 10-20 secs; Gel time 20-30 secs; Tack Free/Solid <60 secs; 95-99% cure 24 hours.

### SAFETY PRECAUTIONS:

#### Health Considerations: Consult the Rhino Linings® Material Safety Data Sheets.

The uncured components of Rhino Duraspray can cause irritation to the eyes, skin, mucous membranes and are harmful if swallowed. When handling, avoid contact with eyes and skin (especially open cuts). In case of contact, immediately wash off with plenty of water for at least fifteen (15) minutes. For eyes, obtain medical attention. Always wash hands before eating. Obtain immediate medical attention in case of ingestion.

Rhino Duraspray contains isocyanates and may cause allergic skin or respiratory reactions. Do not use if you have chronic breathing problems (asthma) or if you have ever had reactions to isocyanates. When applying Rhino Duraspray, avoid breathing harmful vapors. Fresh air-supplied standard painter's hood or full face respirator must be worn by all personnel entering the area where Rhino Duraspray is being applied until all vapors have been exhausted. In case of extreme exposure or adverse reaction, remove affected personnel to fresh air immediately and obtain medical help.

Rhino Duraspray components are combustible liquids Class IIIB. Store and transport according to regulation.

#### Important: Consult the Rhino Linings Material Safety Data Sheets.

Read and follow warning labels on all components. For professional use only. Follow cautions and handling guidelines in Rhino Linings Technical Reference Manual.

The information herein is believed to be reliable, but unknown risks may be present. All warranties of any kind, expressed or implied, including warranties of fitness for a particular purpose, are specifically disclaimed.

#### For Your Protection:

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Rhino Linings Australasia Pty Ltd  
501-505 Olsen Avenue, Molendinar Qld 4214 Australia  
Ph: +61 7 5585 7000 ~ Fax: +61 7 5539 6399

Rhino Linings USA, Inc. ° Rhino Linings of Canada, Inc. ° Rhino Linings Latin America, ° Rhino Linings Europe