

PRODUCT DESCRIPTION

Enduraspray 9000 is a solvent free, two component, fast-cure polyurea spray elastomer coating designed specifically for use in fire retardance applications. *Please refer to the AS ISO 9239.1-2003 fire report – Determination of the burning behaviour using a radiant heat source. (Product tested as IE00029).*

BENEFITS

Suitable for fire retardance applications. Please consult a fire engineer.

Toughness and Flexibility

The high tensile strength and elongation of this product provides protection from mechanical damage and resistance to puncture and compression.

Chemical Resistance

This product has good resistance to many dilute acids, alkalis, salts and solvents.

Increased Productivity and Economy

This product may be sprayed to thicknesses exceeding 1mm per pass and cures to become rain insensitive within minutes.

Safety

This product contains no volatile or flammable solvents. This reduces hazards during transport, storage and application.

TYPICAL CHEMICAL PROPERTIES (21°C)

AMINE RESIN:

Appearance: Clear amber Liquid
Specific Gravity: 1.05
Viscosity (cPs): 500-600
Flash Point (°C): >149

ISOCYANATE:

Appearance: Clear pale yellow Liquid
Specific Gravity: 1.14
Viscosity (cPs): 600 - 700
Flash Point (°C): >100

MIXED SYSTEM:

Solids Content (%): 100
Mix Ratio (by Vol): 1:1



PACKAGING

Resin: Nett 210 kg per 200 litre drum;
Isocyanate: Nett 225 kg per 200 litre drum.

TYPICAL LAB PROPERTIES

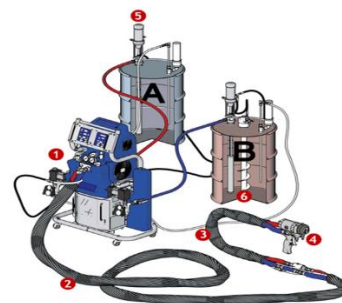
Property	Test Method	Result
Tensile Strength	ASTM D412	13 MPa
Elongation @ 24°C	ASTM D42	>360%
Tear strength	ASTM D624	60-65 N/mm
Hardness	ASTM 2240	85-90A 40-43D
Abrasion Resistance	ASTM C501	
Water Vapour - Transmission rate	E96 (B)	
Water Absorption	AS 3558.1	
Flammability	AS ISO 9239	7.6 kW/m ²



APPLICATION DATA

Enduraspray 9000 is applied using heated, plural component, high pressure airless spray equipment capable of supplying material at the spray gun at a minimum of 2500 psi spray pressure and material temperature of 60 - 65°C. It has been successfully sprayed through Graco Reactor E-XP1 and Graco Reactor E-10HP machines using a Fusion AP spray gun.

For optimum results proceed with application while the air and substrate temperatures are between 0°C and 40°C and the substrate is a minimum 3°C above the dew point and rising (ie the difference between the substrate temperature and the dew point temperature is increasing). Proceed with caution when air and substrate temperatures begin to fall.



Spraying

Spray using a 50% overlap, working first east to west and then north to south to ensure an evenly coated surface. Spray continuously as much as possible and minimise triggering the gun. *Refer to application guide for more detail.*



HEALTH AND SAFETY ADVICE

Refer to Polymer Group Safety Data Sheets for individual products. Also refer to the *Approved Code of Practice for the Safe Use of Isocyanates*.

PERSONAL PROTECTIVE EQUIPMENT

The spraying of polyurethane foam and polyurea/polyurethane elastomers results in the atomizing of the components into a fine mist. Inhalation and exposure to the atomized particles must be controlled and eliminated. The following protective equipment is recommended:

With adequate ventilation an approved respirator suitable for organic vapours, eg 3M 6000 respirator with 3M 6001 organic vapour grade cartridge.

In confined spaces or where there is inadequate ventilation a positive air fed mask or hood. Please note that in all cases, the use of compressed air supplied breathing equipment is OSH notifiable.

Overalls, gloves, protective eyewear and safety footwear.



APPLICATION PRECAUTIONS:

The area surrounding the spray operation **must be protected from overspray and exposure to individuals not involved in the spray operations** as follows:

1. Post warning signs a minimum of 30 metres from all work areas.
2. Close all air intake vents on air handling equipment on the building.
3. Restrict the access of non-application personnel.
4. No welding, smoking or open flame.



STORAGE AND HANDLING PRECAUTIONS

ALL CHEMICALS MUST BE USED BY TRAINED PERSONNEL.

The **resin component** has a nominal storage life of 12 months and the temperature should not exceed 30°C. This material is alkaline, store away from acids, oxidising agents and nitrites. Keep containers closed at all times - check regularly for leaks.

The **resin component** should be agitated during use.

The **isocyanate component** should be kept properly closed and stored indoors in a well-ventilated area under normal factory conditions. Storage at room temperature (20-25°C) also provides a convenient viscosity for handling. Storage at low temperatures (below 10°C) is not recommended because it may lead to some crystallisation; this material must therefore be protected from frost.

Under the recommended storage conditions and in properly sealed containers, the isocyanate has a nominal storage life of 12 months.

If either component is opened and partially used, it should be purged with nitrogen or desiccated air and resealed or refilled into smaller containers to their maximum volume

Dangerous Goods Classification:

ISOCYANATE COMPONENT not classified DG.
RESIN COMPONENT classified AMINES, LIQUID, CORROSIVE, N.O.S. (POLYOXYPROPYLENE DIAMINE)

DG Class 8

UN No: 2735

Haz Chem Code: 2X

Packaging Group: II



DANGER

24 hour emergency response number
Ph +64 9 916 3026 (NEW ZEALAND)

Rev 0