

## BINDER D1010/9 (MEDIUM-SET) MATERIAL DATA SHEET

### PRODUCT DESCRIPTION

D1010/9 is a low viscosity, one component polyurethane binder based on aromatic MDI, which cures by reaction with atmospheric moisture. This is our **medium** curing speed binder, which is primarily used on pour in place binder applications where humidity is less than 50% and temperatures in the 5-20 Celsius range with rubber crumb. D1010/9 can also be used as steel or concrete primer.

### FEATURES

There are several advantages to using polyurethane systems:

- Durable
- Flexible
- Environmentally friendly (0 VOC emission)
- Cured wastes are non hazardous

### TECHNICAL DATA

#### Chemical Properties

Properties	Unit	Test Method	Typical Values
Appearance			clear/amber
Isocyanate Content	%	ASTM D2572-87	11
Density	g/cm <sup>3</sup>	ASTM-D 1475	1.10 – 1.15
Viscosity @ 25°C (Brookfield DV-2+ @ 20RPM Spindle 3)	cP	ASTM-D 4878	3500 - 4500
Flash Point	°C		>200
Mixing Ratio	weight		15-20
Working Time	minutes		30-60
Tack Free @ 22°C	hours		5-8

### Curing Profile and Application

Reaction starts with atmospheric moisture. Higher humidity levels will reduce working time, and higher temperatures will reduce curing time. Moisture content in the rubber crumb will also be a factor.

Test procedure:

- Before starting any job, it is important to record temperatures and humidity levels, then do a small test by combining rubber and 20% binder in a small cup. Mix well and pour out onto the surface. Let stand for 30 min. Test for workability. This will be your guide on what the curing profile for the large job will be.

If no curing appears after 2 hours, it may be necessary to add additional moisture (ie: add up to 1% water or mist water over the surface) to boost the reaction, as you want the curing to be well on its way by the end of the day. Requirements may change as your environment changes during the day.

## **SAFETY/PRECAUTIONS**

**COMBUSTIBLE LIQUID AND VAPOR. CORROSIVE AND IRRITATING TO EYES, SKIN AND LUNGS. MAY BE AGGRAVATING TO ASTHMA, BRONCHITIS, EMPHYSEMA, SKIN ALLERGIES, AND ECZEMA. HARMFUL OR FATAL IF SWALLOWED.**

Use only with adequate ventilation. Do not wear contact lenses when handling. Wear chemical resistant gloves and eye protection when in contact. Keep container tightly closed when not in use. Have an eye wash station and emergency shower available.

**First Aid:** SEE MSDS

**CARE MUST BE TAKEN TO PREVENT ENVIRONMENTAL CONTAMINATION FROM THE USE OF THIS MATERIAL. THE USER OF THIS MATERIAL HAS THE RESPONSIBILITY TO DISPOSE OF UNUSED MATERIAL, RESIDUES, AND CONTAINERS IN COMPLIANCE WITH ALL RELEVANT LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS REGARDING TREATMENT, STORAGE AND DISPOSAL FOR HAZARDOUS AND NON-HAZARDOUS WASTES.**

Empty containers should be decontaminated and either passed to an approved drum recycler or destroyed.

**Emergency Contact Number: Canutec (613)-966-6666**

## **SURFACE PREPARATION**

As a primer, all surfaces must be clean, dry and free from dust, dirt, oil and other foreign materials before application of coatings. All loose paint, mortar spatter, mill scale and rust must be thoroughly removed from the surface. If applying to new steel, or a smooth surface, the surface should be blasted or etched, forming a surface profile to which the coating can adhere to.

## **APPLICATION/DIRECTIONS**

Mix 15-20 parts by weight MDI binder into rubber crumb mixture until completely wetted. Pour mixture into location using trowel and tamp out to level. Continue mixing and pouring, making sure to start where you left off ensuring bonding. Full curing will take place 24-48 hours after application. Clean up tools with lacquer thinner.

## **STORAGE/SHELF LIFE**

Material should be stored in a tightly closed container. Keep in a cool, dry, and well ventilated place. Keep away from incompatible materials. Avoid contact with water or moist air. Keep at a temperature between 20-25°C (75-77°F) for quality reasons. This product has a shelf life of approximately 6 months.

*Disclaimer: Other than as expressly stated in IPS's Terms and Conditions of Sale governing the sale of this material, the information enclosed is given without warranty, representation, or license of any kind. The relationship between the Purchaser and IPS, with regard to this material, is governed exclusively by IPS's Terms and Conditions of Sale. The conditions of your use and the suitability of IPS's products and technical assistance concerning suggested formulations, processing techniques, substrate suitability, etc. are beyond IPS's control. Therefore, it is imperative that you test IPS's products under your own processing conditions to determine to your own satisfaction whether they are suitable for your intended uses and applications.*

Last Revised: May 1, 2011