ENGINEERING DATA SHEET

DSM 3.5.9

Polyurethane (PU-RIM)

Solid

General:

PU-RIM is a two part polymer mixture (isocyanate & polyol) which is low pressure injected into a mould (**R**eaction **I**njection **M**oulding). This mixture undergoes an exothermic chemical reaction and converts to a rigid **solid** PU thermoset. Parts can be through coloured at mixing stage.

Benefits:

- Mix ratios can be altered to mimic a range of elastomers & thermoplastics.
- Can tolerate thin & thick sections without 'sinkage'.
- Threaded inserts can moulded in situ.

Limitations: (unmodified)

- Cannot be recycled.
- Slow cycle time compared to injection moulding.
- Unit cost much higher than Inj. Moulded equivalent.

ASM (DEK) Applications:

- Low volume alternative to Injection Moulding.

Advantages of RIM:

With low capital investment plus short lead time combine to make this process a viable substitute for injection moulded thermoplastic components for product development or for low volume production.

These values are representative. For critical applications, refer to data-sheet.

MECHANICAL PROPERTIES					
	HARDNESS Shore A	TENSILE STRENGTH:	YOUNGS MODULUS:	POISSONS RATIO:	DENSITY:
PU - RIM	---	**50** MPa	**2.0** GPa	**0.35**	**1050** Kg/m^3

GRADE	SUPPLIER	UL No.	RECYCLE CODE
Baydur 110	**Bayer**	**E 83364**	**----**

Alternatives:

Alternative polymers are allowed only with the express written permission of ASMPT. Please email details of your request to engineering_enquiries@asmpt.com

Issue	01	02	03	04	05	06	07	08	09
DCR	7135	44832							