

## DATA SHEET

### Two Component Casting Polyurethane LIONBOND™ U55A with Hardener U55B

LIONBOND™ U55A/B PU materials for waterproofing, packing, irrigation and bonding of electronic and electrical machinery products. The production of castings and in applications requiring high levels of toughness and durability. Also for irrigation, bonding, coating and mold train of industrial products.

#### Key Properties

- Withstand moisture well, thus also suitable for thin layers
- High tear strength and elongation
- Flexible to -60°C
- Excellent resistance of alkalinity

#### Applications

- Foundry Patterns
- Percussion tools for working sheet metal and plate
- Flexible moulds and machinery parts
- Core boxes
- Machinery Parts
- Assembly jigs
- Vibration absorption
- Impact protection
- Abrasion and impact resistant parts
- Ceramics Industry
- Rubberlike prototype parts
- Conveyor rollers

Physical Property	U55A Polyol	U55B Isocyanate
Viscosity, cps	2,100	6,000
Density, g/cm <sup>3</sup>	1.03	1.07
Color	Light yellow	Clear
Mix Ration, by Weight	100	100

#### Processing parameters

1. After weighting the material, pour U55B (isocyanate) into stirring container to let the container become lubricative. Pour U55A (polyol) into stirring the same container and mix thoroughly by agitator at 100-200rpm for about 1-2 minutes. Please do not agitate

- 
- with high speed.
- Put the mixture into the vacuum to degas for about 1-2 minutes and then exhaust approximately 2 times.
  - Take out the mixture and pour it into the model. Let the mixture seek its level up and over the model.
  - Hardener should be reseal well after using.

---

<b>Physical Properties</b>	Color	-	Light yellow
	Potlife, 25°C	-	60 Mins
	Tack free	-	90 Mins
	Demold time	-	3~6 Hrs
	Hardness	Shore	A55
	Tensile Strength	Kgf/cm <sup>2</sup>	35
	Elongation	%	220
	Tear Strength	Kgf/cm	22

---

**Storage** The resin and hardener should be stored in a dry place at 5-25 °C.

---

**Precautions** Lion's products are generally quite harmless to handle provided that certain precautions normally taken when handling chemicals are observed. The uncured materials must not, for instance, be allowed to come into contact with foodstuffs or food utensils, and measures should be taken to prevent the uncured materials from coming in contact with the skin, since people with particularly sensitive skin may be affected. The wearing of impervious rubber or plastic gloves will normally be necessary; likewise the use of eye protection. The skin should be thoroughly cleansed at the end of each working period by washing with soap and warm water. The use of solvents is to be avoided. Disposable paper-not cloth towels should be used to dry the skin. Adequate ventilation of the working area is recommended.