
Hi-Urethane LM-60

Hi-Urethane is a synthetic urethane resin which a polymer developed by our own technologies. Hi-Urethane LM-60 has the hardness of 55 ± 5 (Shore A) in the Hi-Urethane system.

This is a coating for floor of a variety of stadium for interior and exterior as well as floor coating for general office, factory, swimming pool, bathroom and waterproofing for building roofs due to urethane peculiar chemical properties, excellent tensile strength and striking elongation and elasticity.

CHARACTERISTICS

- Remarkable weathering resistance and durability.
- Decorative appearance and excellent adhesion strength.
- Excellent impact and abrasive resistance.
- Easy to repair and inexpensive maintenance cost.
- Withstand any crack and tremble.
- Variable colors available.
- Obtain seamless film and even elasticity
- Can absorb and degrade impact.

RECOMMENDED USE

- Floor coating for office, hospital, school and library.
- Track, tennis court, gymnasium and stadium
- Floor coating for anti-tremble and anti-noise in a mill or warehouse
- Waterproofing material for roofs of apartment or building
- Variety of waterproofing materials for buildings.
- Floor coating for office, hospital, school and library

PHYSICAL PROPERTIES

- Appearance part A : yellowish liquid
 part B : various colors
- Non-volatile content (%) part A : min.99 part B : min.96
- Specific gravity (25/4 °C) part A : 1.05 ± 0.05
 part B : 1.68 ± 0.1
- Viscosity (cps/25 °C) part A : 5000 ± 1000
 part B : 85 ± 5 KU/25 °C
- Theoretical coverage $1.46 \text{ kg/m}^2 \times \text{mm}$
- Pot life (min/25 °C) 30 ± 10
- Curing time (hour/25 °C) 24~48
- Hardness (Shore A) 55 ± 5
- Elongation (%) min. 460
- Tensile strength (N/cm²) min. 230.2
- Tear strength (N/cm) min. 135.1

THINNER

- thinner 001 (winter)
- thinner 003 (summer)

MIXING RATIO

- A : B = 1 : 3 (by weight)

PACKING UNIT

- Part A : 7 kg/10 ℓ , Part B : 21 kg/18 ℓ
- Could be packed on request.

STORAGE

- Store it indoor at room temperature.
- Storage temperature : 0~43 °C
- Humidity : 0~70% (unopened condition)
- Must keep sealed remained product once opened.

SHELF LIFE

- 6 months in unopened containers under normal warehouse conditions.

PRECAUTIONS

- Keep adequate ventilation during the application.
- Store it indoor and cool place and keep away from ignition.
- Use masks, gloves, or other protector during the application.
- Store the remaining materials quite sealed after use.
- Do not exposure to the moisture.
- Keep away from children during coating and storing.
- In case of ingestion or skin contact, administrate first aid according to notice on container or Material Safety Data Sheet(MSDS), and see the doctor immediately.
- Do not use other purpose except original recommended use.

Hi-Urethane is a Jeong Seok's trade mark

IMPORTANT The information contained in this publication is, to the best of our knowledge, true and accurate, but any recommendations or suggestions which may be made are without guarantee, since the conditions of use are beyond our control.

☞ This document contains purchasing information as well as a construction manual based on international standards ISO/IEC GUIDE 14(product and service information for customers) and ISO/ IEC GUIDE 37(product instruction manual for customers)

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LIMITS

This Sheet covers with the working with **Hi-Urethane LM-60**.

This Sheet is a kind of standard of operations, so if there a specification for detail work and there are some difference in the two documents, it's nice to work according to the specification.

WORKING CONDITION

- Application tools Rubber spatula, trowel, roller
Electric agitator(minimum0.5Hp ↑),
brush
- Thinner thinner 001 (for winter),
thinner 003 (for summer)
- Recoating interval after 24hours (25℃)
- Thickness limit Maximum 5 mm/coat
per one coat
- Mixing ratio A : B = 1 : 3 (by weight)
- Pot life (min/25℃) 30 ± 10
- Theoretical coverage 1.44 kg/m² × mm

SURFACE PREPARATION

- Importance of surface treatment : There are much alkaline dust on the concrete surface, and it make poor adhesion with polyurethane and surface. So it must be removed for strong film and excellent adhesion.
- Cure the concreted surface sufficiently to remove the alkali of the surface and keep the moisture content within 8% max.

Temperature (℃)	Need to Curing (day)
24	28 Min.
21	30 Min.
10	40 Min.
7	60 Min.

- Clean the surface with acid , sandblast or grinding if you need.
- It should be cured completely when the appropriate primer or equivalent material was applied.
- Remove dust, sand, moisture and oil on the surface.
- In case that the surface to be applied is damp, dry fully and apply.

DIRECTIONS FOR WORK

1. Direction for **Hi-Urethane Primer** coating

- Check the cleaned well surface.
- If there are some water it must be dried and must be not dusty.
- Then apply to cleaned surface with proper primer, Hi-Urethane Primer #300.
- Apply with the Hi-Urethane LM-60 after curing the primer. It may be one to twelve hours after primer coating.
- See the DIRECTIONS FOR USE of Hi-Urethane Primer for the details.

2. Direction for **Hi-Urethane LM-60**

- Check the curing of Hi-Urethane Primer coating and then apply the Hi-Urethane LM-60.
- Mix well part A and B by correct mixing ration with electric agitator.
- You can use one can each part A and B, because it packed with suitable weight according to exact mixing ratio.
- You can use the thinner 001(for winter) or thinner 003(summer) if you need.
- Must mix well part A and B to scrape up the product on the wall of package cans. Otherwise you might have the failure curing film.
- When it's hot day, because there may be very fast gelling, so mix part A and thinner first, and then part B put into mixture and mix well.
- After mixing well sufficiently, apply to surface with the Hi-Urethane LM-60 with rake or roller.
- Especially for the roof in summer season, you'd better apply the Hi-Urethane two times because there might be much bubbles in coating film.
- In that time, you apply with 0.2~0.3 kg/m² of Hi-Urethane LM-60 for first coating. And then apply with the remaining quantity of Hi-Urethane LM-60 for final intermediate coating.
- If you need more than 3 mm thickness, apply within 3 mm per one time until to get aiming thickness.
- Don't use the mixing product after pot life.
- When the temperature is higher than 28℃, you might as don't use as possible. But in that case unavoidable applying, must apply 2 or 3 times for intermediate coating and apply it after 5 p.m.

3. Direction for **Hi-Urethane TOP COAT**

- Check the curing of intermediate coating and then apply the Hi-Urethane TOP COAT.
- Repair the intermediate if there are some problems as curing problems or coming undone from the floor.
- Mix well the Hi-Urethane TOP COAT part A and part B.
- You don't need electric agitator because the viscosity of top coat is very low.
- Coat the surface with mixed well Hi-Urethane TOP COAT with paint roller, sprayer or other instruments.
- It could be used thinner when it need to adjust the fluidity for easy control.
- Do not use the alcohols as thinner, the alcohols react with the Hi-Urethane TOP COAT and became poor film.
- If you use sprayer, clean well the hose and other equipment of sprayer after the operations to prevent curing the Hi-Urethane TOP COAT in the equipment.
- Keep prevent passage in 24~72 hours after applying and then permit when it fully cured.
- See the DIRECTIONS FOR USE of Hi-Urethane TOP COAT for the details

PRECAUTIONS

- Keep adequate ventilation during the application.
- Store it indoor and cool place and keep away from ignition.
- Once opened, containers should be resealed immediately after removal of the product.
- Do not exposure to the moisture .
- Keep away from children during coating and storing.
- Take a gas mask and put on the other personal protector in

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the applying.

- Must use suitable thinner, otherwise you must get failure coating film.
- Products of this type can be expected to be eye and skin irritants and have the potential to cause sensitization or other allergic responses.
- Appropriate precautions should be taken to avoid eye and skin contact and to avoid inhalation of the aerosols or vapors.
- Consult the relevant Material Safety Data Sheet for appropriate handling procedures and protective equipment prior to using this or any other material referred to in this bulletin.
- See Material Safety Data Sheet for emergency and first aid procedures.
- Must not use this product for other purposes except for its own use.

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