

Rediprime®

Laminating Adhesive

PRODUCT DESCRIPTION

A one component, sprayable, solvent-borne flexible polyurethane adhesive suitable for bonding a wide range of substrates, including polystyrene foam, timber, plastic and various metallic and Colorbond surfaces. It has been designed for bonding polystyrene foam to a wide variety of flexible and rigid facing materials in the manufacture of insulation and structural sandwich panels.

INTENDED USES

- Good adhesion to a wide range of substrates Polystyrene foam, timber, plastic and various metallic and Colorbond surfaces
- Fast Laminating adhesive at elevated temperature

FEATURES

- Spray application
- Bonds in 1 1.5 hours @ 25°C
- Bonds in 12 minutes @ 50°C

Excellent adhesion

PRODUCT DATA

Volume Solids	50%
Theoretical Coverage	10 Square meters / Litre at 50 Microns DFT
Finish	Clear
Colour	Red
Gloss	Gloss
Mixing Ratio	Single Pack
Pot Life	1 Hrs @ 25°C
Typical Thickness	42 to 85 Microns DFT (85 to 170 Microns WFT)
Cleaner	LM1 Thinner
Flash Point	> 100°C
Specific Gravity	1.17

CURE & RECOAT

Substrate Temp	Tacked	Hard Dry Note 1	Minimum Recoat Time	Maximum Self Recoat Time Note 2
5°C	4 Hrs	8 Hrs	4 Hrs	1 Day
10°C	3 Hrs	6 Hrs	3 Hrs	1 Day
15°C	2 Hrs	4 Hrs	2 Hrs	1 Day
25°C	1 Hrs	2 Hrs	1 Hrs	1 Day
40°C	0.5 Hrs	1 Hrs	0.5 Hrs	1 Day

Note 1: Full cure 7-14 days. Pull-off adhesion testing is best conducted after at least 3 Days cure Note 2: Where the Rediprime is exposed to direct sun and UV, the maximum recoat time will be

considerably reduced. Contact Liquimix for advice

ENGINEERING	Property	Method	Results
DATA	Adhesion Testing	ASTM D4541	> 5 MPa

Rediprime

POT LIFE

Mixed Product Temperature	Gel Time (Note 1)
10°C	4 hrs
15°C	2 hrs
25°C	1 hrs
40°C	0.5 hr

Note 1: Pot Life is dependent on product temperature and humidity. Keep products cool

LIMITATIONS

- Pot Life is dependent on temperature and Humidity
- Thin film dry times are dependent on temperature and film thickness
- Thicker films will take longer to cure through
- Higher cure temperatures and direct exposure to the sun will shorten the recoat time
- Do not use RediPrime with Aluminium Spray Equipment

SURFACE PREP

Steel

- 1. Remove all rust, mill scale, oil and any previously applied coatings back to bare, clean steel using an abrasive blast. Welds should have slag and spatter fully removed.
- 2. Abrasive blast to Sa2½ (ISO 8501-1:2007) or SSPC-SP10. A sharp, angular surface profile of 60-100 microns is recommended.

APPLICATION

Instructions

The adhesive is designed for spray application at a rate of 100 to 200 grams per square meter. The adhesive is particularly suitable for high-speed lamination. It is generally recommended that panels be assembled within 30 minutes, although under normal conditions and humidity, good adhesion can be obtained after at least 45 minutes of open time. Pressing of the assemblies is recommended to ensure intimate contact. Low pressure of 28-70 kPa or 4 - 10 Psi is all that is required. Cure can be greatly accelerated by hot press where excellent bonds can be achieved within 12 minutes compared with 1 - 1.5 Hours at ambient temperatures

Equipment

Single Component Graco Airless	Tip Range 17-21 Thou (0.38-0.53 mm). Output fluid pressure
Pump	at spray tip not less than 3000 Psi (210 kg/cm²)
Pressure Pot	Output fluid pressure not less than 50 Psi (2.51 kg/cm²)
Roller and Brush	Suitable for small areas
Temperature of material at gun:	Ambient

Environment

Relative humidity:	The relative humidity must be less than 85%
Dew point:	The substrate temperature must be at least 3°C higher than
	the dew point temperature
Substrate Temperature:	The substrate temperature must be a minimum of 5°C

TDS038/01 6-09-2023 2 of 3

Rediprime

Mixing

Always stir Rediprime in its original containers well before use.

Avoid entrapping air during mixing

Thinning

Thinning of Rediprime is not considered necessary or desirable.

Cleanup

LM1 Thinner may be used for general clean-up of equipment and hoses. For soaking of contaminated metal parts, use SWELL. The use of plastic soak containers with clip on lids and removable baskets makes the job easier. Replace the SWELL regularly as soon as it starts turning cloudy and dirty.

NOTE: NEVER USE SWELL TO CLEAN PAINTED SURFACES, AS IT WILL STRIP THE PAINT. NEVER USE SWELL TO FLUSH PUMPS AND HOSES. DO NOT ALLOW SWELL TO COME INTO CONTACT WITH THE OUTSIDE PROTECTIVE POLYURETHANE COVER OF HOSES.

STORAGE & HANDLING

Store in dry, shaded conditions away from sources of heat and ignition and in original properly sealed containers. Protect from heat and frost. Protect contents from moisture.

A shelf life of 12 months minimum is typical with unopened containers if stored at ambient conditions at 25 °C. If either component is opened and partially used, it should be purged with nitrogen or desiccated air and resealed.

PACK SIZE

20L Kits

20L of Reprime in a 20L Container

HEALTH & SAFETY

Rediprime is for professional use only.

The product contains isocyanates and may require the use of air feed hoods,

This product should not be used without consulting the Safety Datasheet (SDS) as published on the Liquimix website first.

Please observe all health and safety as well as environmental legislation that applies in your state

Do not use application equipment made of aluminium. Experience has shown that under certain conditions, the reaction between the solvent and aluminium components may occur. With the high pressure used in this type of equipment, the results can be devastating. All components in contact with the adhesive should be made of stainless steel.

DISCLAIMER

The information contained herein is offered without charge and is for use by technically qualified personnel at their own risk. All statements, technical information and recommendations contained herein are based on tests and data which we believe to be reliable, but the accuracy or completeness thereof is not guaranteed, and no warranty of any kind is made with respect thereto

LiquiMix Pty Ltd - ABN 32 062 887 585 24 Rosa Place, Richlands QLD 4077

Phone: 1300 123 085

Web: - <u>www.liquimix.com</u> Sales Enquiries: - <u>sales@liquimix.com</u> Account Enquiries: - <u>accounts@liquimix.com</u>

TDS038/01 6-09-2023 3 of 3