



# Rhino Linings®

**PREMIUM PROTECTION**



## Metal Fusion

Revised Date: 18/01/2016

This TDS Replaces All Previous Versions

**SIDE-A – Resin**

**SIDE-B – Hardener**

**SIDE-C - Colour Powder**

### DESCRIPTION

Rhino Linings Metal Fusion – 11.3ltr kit is a three-dimensional metallic epoxy system designed to create elegant and exotic looking seamless floors. Metal Fusion is a 100% solids, two component, epoxy formulation consisting of a high-performance Bisphenol A epoxy resin blend combined with a Cycloaliphatic curing agent. It is a versatile, high grade epoxy material for a variety of job applications. Always do a sample of the colour selected and have it approved before starting a job.

### FEATURES & BENEFITS

- 100% solids, zero VOC
- Low viscosity
- Excellent adhesion. Bonds well to concrete and other substrates
- Adheres to damp concrete
- Not regulated by the DOT
- Self-levelling
- Resistant to amine blush, resistant to exudation
- Will not crystallize, even in cold environments
- Insensitive to moisture

### TYPICAL USES

Ideal for residential and commercial use including, living rooms, kitchens, bathrooms, retail stores, office spaces, lobby areas, tattoo parlours, barber shops, hair salons, restaurants, clothing stores, casinos and showroom floors.

### NOT RECOMMENDED FOR

- Not suitable for external use or other areas of high UV exposure.
- Avoid working in conditions that could cause condensation to form on the uncured coating (for example High humidity or when the temperature is close to the dew point) as it can interfere with subsequent inter-coat adhesion. If the surface is affected in this manner, it will require cleaning and a suitable profile prior to recoating.
- For high foot traffic and wet areas, the addition of slip resistant particles and slip testing should be considered.
- Do not apply to concrete less than 28 days old
- Do not apply to concrete less than 10°C and more than 35°C
- Do not apply to substrates with a moisture content higher than 5%
- Should not be used where surface temperatures consistently exceed 50°C
- Low temperature & high humidity can cause amine bloom. Contact Rhino Linings Technical Department.

**NOTE** – Substrate temperature **must** be 3°C above the dew point prior to application.

### TYPICAL PHYSICAL PROPERTIES

Adhesion -concrete	ASTM D-903	300 psi
Hardness (Shore D)	ASTM D-2240	82
Tensile Strength (psi)**	ASTM D-412	7,500
Flexural Modulus (psi)	ASTM D-790	11,900
Elongation (%)	ASTM D-412	4
Compressive Strength (psi min)	ASTM D-695	10,000

### CHEMICAL PROPERTIES

Solids by Volume/Weight	100%
Volatile Organic Compounds	0 lbs/gal (0 g/l)
Mix Ratio, parts per volume	2A [resin] : 1B [hardener]
Pot Life	15 min
Recoat	12 – 24 hrs
Tack Free @ 70°F (21°C)	5 hrs (warmer temps accelerate dry time)
Walk on Time (light foot traffic)	12 – 15 hrs
Coverage Rate per Gallon	40 – 50 sqft
Recommended Application Temperature	≥40°F (4°C) [cures faster in warmer temps, cure time is longer in cooler temperatures]
Odour	Low

Flash Point  
Shelf Life - unopened containers

Resin = 400°F, Hardener = 210°F  
12 months

## MIXING

The mixing ratio for Metal Fusion is 2 parts A to 1 part B. Mix thoroughly and slowly for 3 – 5 minutes using a drill motor and mixing paddle. Scrape the sides and bottom of the container while mixing. Mix up no more material than can be used in a 15-minute time period.

## CHEMICAL RESISTANCE.

**Excellent resistance to the following reagents:**

Xylene, 1,1,1	5% Detergent Solution	50% Sodium Hydroxide
70% Sulfuric Acid	10% Hydrochloric Acid	Skydrol
Synthetic Gasohol	Mogas	Diesel [No. 2 and 3] oils
JP-4, 5,7,8	Diethylene Glycol	Monomethyl Ether

**Good resistance to the following reagents:**

Toluene	MEK	EB
10% Acetic Acid	Ethyl Alcohol	Methyl Alcohol

Contact Rhino Linings technical/sales department for details.

## SURFACE PREP

The surface to be coated should be thoroughly clean; free of any contaminants such as oil, grease or other incompatible materials. Shotblasting or dustless grinding are common surface preparation methods to clean and etch the surface. Some surfaces may also require scrubbing with detergent following by rinsing and wet/dry vacuuming. Contact Rhino Linings technical / sales department for application procedures.

## THICKNESS / COVERAGE

Applied at a minimum of 1mm thick  
Coverage – Approximately 1m<sup>2</sup>/L

## STORAGE & SHELF LIFE

Components should be stored in sealed containers in a dry area, between 15 and 25°C.  
Unopened containers have a shelf life of 12 months at 25°C

## COLOUR OPTIONS

Available in 11 standard metallic colours

## BASE MATERIAL COLOURS

Part a-Resin  
Part b-Hardener  
Powder Pigment- 11 colours

## VOC (VOLATILE ORGANIC COMPOUND)

Low

## SAFETY PRECAUTIONS

**Health Considerations:** Consult the Rhino Linings® Material Safety Data Sheets. This chemical system requires the use of proper safety equipment and procedures. Please follow the Rhino Linings® product MSDS and Safety Manual for detailed information and handling guidelines.

**For Your Protection:** The information and recommendations in this publication are, to the best of our knowledge, reliable. Suggestions made concerning the products and their uses, applications, storage and handling are only the opinion of Rhino Linings Corporation. Users should conduct their own tests to determine the suitability of these products for their own particular purposes and of the storage and handling methods herein suggested. The toxicity and risk characteristics of products made by Rhino Linings Corporation will necessarily differ from the toxicity and risk characteristics developed when such products are used with other materials during a manufacturing process. The resulting risk characteristics should be determined and made known to ultimate end-users and processors.

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