# Technical data sheet



Unigrund LM 4516

**1-component adhesive primer** and **corrosion protection primer** for industrial, commercial and DIY use

# PRODUCT DESCRIPTION

#### General

Solvent-based, universal 1-component adhesion primer and corrosion protection primer based on special synthetic resins for interior and exterior use. The product is characterised by very good rust protection, very fast drying and excellent covering properties.

# **Application area**





Metal constructions made of iron, steel, non-ferrous metals with zinc, aluminium and copper.

Materials made of coatable, solvent-resistant plastics such as hard PVC. For the coating of wood and metal indoors and outdoors.

# **PROCESSING**

# **Processing instructions**





#### Please stir the product before use.

- The temperature of the product and object, and the room temperature must be at least + 5 °C.
- The optimal conditions for use are between 10 25 °C with a relative atmospheric humidity between 40 80 %.
- Spraying is only allowed in spray booths complying with the VOC Directive.
- The color shade, compatibility and adhesion to the substrate must be checked by creating sample panels.
- Any change in the processing sequence, environmental conditions, nonobservance of instructions or the use of products not listed may have an unfavourable effect on the result.

# **Application technique**









	Cup gun	Brushing	Rolling
Spraying nozzle Ø (mm)	1,8 - 2,0	-	
Spraying pressure (bar)	2,0 - 2,5	-	
Diluent	Nitroverdünner (8017)	-	
Diluent amount added (%)	20	-	
Applied quantity per application (ml/m²)	100 - 125		

The shape and surface condition of the workpiece as well as the type of application influence the actual consumption. Accurate values for consumption must be obtained by applying trial coats in advance.

# **Drying times**

(at 23 °C and 50 % rel. humidity)



Dust-dry (ISO 1517)	ca. 20 minutes
Touch-proof	ca. 3 hour(s)
Recoatable (synthetic resin coatings)	ca. 4 hour(s)
Recoatable (two-component coatings)	ca. 12 hour(s)

The figures given above are reference values. The drying time depends on the type of substrate, coat thickness, temperature, air exchange and relative atmospheric humidity.

Lower temperatures and/or high level of atmospheric humidity can increase the drying time.

Avoid direct sunlight!

If the drying time exceeds 48 hour(s), the primer must be sanded before applying the following coating.

# Cleaning the working equipment





With Aceton-Waschmittel (8001) or Nitro-Verdünner 8017 (8017) immediately after use.

# **SUBSTRATE**

# Type of substrate

Iron and steel, non-ferrous metals, hard PVC and coatable plastics / Wood and wood-based materials

# **Substrate property**

The substrate must be dry, clean, capable of holding the paint, free from separating substances such as grease, wax, silicone, resin etc. and free from wood dust, as well as tested for suitability for coating.

A prerequisite for ensuring long durability of the coating is to observe the basic principles of constructional wood preservation.

Please observe the additional documents:

- ÖNORM B 3430-1
- ÖNORM B 2230-1
- DIN 18363
- Current BFS information sheets

Remove old coatings that cannot be recoated.

# Substrate preparation

#### Iron and steel:

Remove rust down to bare metal. Thoroughly remove greasy or oily impurities using Entfetter (7233).

# Zinc, aluminium and other non-ferrous metals:

Sand until matt with abrasive fleece and Entfetter (7233).

# Hard PVC and coatable plastics:

Sand until matt with abrasive fleece and Entfetter (7233).

#### Wood and wood-based materials:

Break sharp edges and remove any wood extractives such as resins and resin galls. Wood sanding Grit size 120 - 150

## Old coatings:

Sand with grit size 120 and clean. Remove old coatings that cannot be recoated.

The compatibility of the paint must be tested on old coats of synthetic resin (risk of "lifting").

# **COATING SYSTEM**

# **Impregnation**

#### Wood and wood-based materials:

If necessary, impregnate outdoors once with Pullex Imprägnier-Grund (4436) (applies to timbers of durability class 3-5 according to EN 350) to protect against blue stain, fungal decay and insect infestation.

Use wood preservatives safely. Always read the label and observe the respective technical data sheets of the products before use.

Please follow our ARL 056 - Working guideline for the use of wood preservatives.

#### **Primer coat**

#### Iron and steel:

Indoors: 1 x Unigrund LM (4516)
Outdoors: 2 x Unigrund LM (4516)
Stainless steel and Nirosta:

1x 2K-Epoxy-Grund (5604) (Metal)

Zinc:

2 x Unigrund LM (4516)

Aluminium and other non-ferrous metals:

1 x Unigrund LM (4516)

Anodised aluminium:

1x 2K-Epoxy-Grund (5604) (Metal)

Plastics:

1 x Unigrund LM (4516)

Due to the large number of plastic materials, an adhesion test is recommended.

# Wood and wood-based materials:

1 – 2 x Unigrund LM (4516)

Attention: wood moisture must not exceed 15 %.

For wooden windows we reccomend Alkydgrund Alkyd-Grund (4501).

# Intermediate sanding



Grit size 240 - 280

Remove sanding dust.

# Intermediate/finishing coat

Unigrund LM (4516) can be overcoated with most conventional solvent-based 1-component and 2-component topcoats.

Particularly suitable are:

Samtalkyd (4514) Brilliantalkyd (4503)

Express-Maschinenlack (4504)

Recoating with 2K PUR coatings such as 2K-PU-Multilack Glänzend (4527) or 2K-PU-Multilack Matt (4526) should possibly be carried out within 2 days to avoid lifting.

	ORDERING INFORMATION
Size of trading unit	375 ml; 750 ml; 2,5 l
Colour shades	<b>Standard colour(s):</b> Weiß, tönbar (54067) Grau (4516081826) Rotbraun (4516079330)
Supplementary products	2K-Epoxy-Grund (5604) 2K-PU-Multilack Glänzend (4527) 2K-PU-Multilack Matt (4526) Alkyd-Grund (4501) Aceton-Waschmittel (8001) Brilliantalkyd (4503) Entfetter (7233) Express-Maschinenlack (4504) Nitro-Verdünner 8017 (8017) Pullex Imprägnier-Grund (4436) Samtalkyd (4514) Please refer to the corresponding technical data sheets of the products.
	FURTHER DETAILS
Durability / storage	Min. 3 year(s) in the original sealed containers.  Make sure the product is protected against moisture, direct sunlight, frost and high temperatures (above 30 °C).  Close opened containers well and use up the content as soon as possible.
Technical specifications	VOC content of the ready-to-use mixture: EU limit for Unigrund LM (Cat A/i): 500 g/l. Unigrund LM contains maximum 490 g/l VOC.
Giscode	BSL50
Safety information	The inhalation of paint aerosols during spray application must generally be avoided. This is ensured by the proper use of a respirator (combination filter A2/P2).
	When sanding, use at least a P2 dust filter as personal safety equipment to protect against abrasive and wood dust. In case of hardwood (especially for Beech, Oak) a dust filter P3 is recommended.
	Further information on the subject of safety during transport, storage and handling as well as disposal can be found in the relevant safety data sheet. The current version can be accessed on the Internet at <b>www.adler-lacke.com</b> .