# Technical data sheet



ADLER Varicolor 4117

Universal matt primer and topcoat with priming effect, for DIY and trade

# PRODUCT DESCRIPTION

### General

Easy-to-use, water-based matt primer and topcoat for interior and exterior use with very good all-round properties. Universal application on a wide range of substrates. This low-odour, eco-friendly product is block-resistant, free from aromatic hydrocarbons and formaldehyde and non-yellowing. Stand-out features of this product include excellent weathering resistance and permanent elasticity, very effective insulation of active substances in the wood and a good rust protection effect.

A finishing coat with rough glimmering texture can be achieved with ADLER Varicolor E20 (4139).

Glossy surfaces can be achieved by colourless overcoating with ADLER Varicolor Farblos Farblos, Glänzend (4161050252).

# Special properties and standards

















#### ADLER green product

ADLER green products are objectively tested and certified according to three categories: Environment, Health & Safety, and Durability. Only products that score positively in all these areas are awarded the green sustainability label.

Colour fastness as per BFS data sheet no. 26
 Class A
 Group 1-3 (depending on colour)

• Heat-resistant up to approx. 100°C

#### ÖNORM EN 71-3

Confirmed by an external test certificate.

Safety of toys; migration of certain elements (free of heavy metals).

#### DIN 53160-1 and DIN 53160-2

Perspiration and saliva-proof properties

### declared product in baubook

Criteria of the "Baubook Ökologisch ausschreiben" fulfilled

# Cradle to Cradle Certified® Bronze

Cradle to Cradle Certified® is the global standard for products that are safe, circular and responsibly made.



# French ordinance DEVL1104875A Confirmed by an external test certificate.

Marking of construction coating products for their emission of volatile pollutants: A+

# Application area









Efficient coating on wood, metal, rigid PVC and intact old coatings for exterior and interior use.

For dimensionally stable timber components for exterior and interior use, such as e.g. wooden windows and front doors.

Not suitable for coating floor and roof surfaces.

For non-dimensionally stable timber components in the outdoor area we recommend for example Pullex Color (4403) or Pullex Aqua-Color (5325).

For heavy weathering on metal, we recommend using ADLER Varicolor E20 (4139). Particularly suitable for wrought-iron works of art, such as lattices, fences or grave crosses.

For sheet metal roofs and steel constructions with extreme weathering we recommend Ferro GSX (4505). Coat horizontal sheet metal outdoors with Ferrocolor (4506) or Ferro GSX (4505).

We recommend ADLER Histo-Base (5497) / ADLER Histo-Protect (5097) for the restoration of oil paints and old, historic wooden windows and front doors.

Please refer to the corresponding technical data sheets of the products.

#### **PROCESSING**

# **Processing instructions**





#### Please stir the product before use.

- The temperature of the product and object, and the room temperature must be at least +10 C.
- The optimal conditions for use are between 15 25 °C with a relative atmospheric humidity between 40 - 80 %.
- Resin flow cannot be avoided by the coating.
- Early exposure to water from rain or dew must be prevented!
- Use sealing profiles and masking tapes suitable for water-based paints.
- Sealants must be compatible with the coat and may only be applied once the paint has dried through. Sealing profiles with plasticizers tend to stick together in combination with paints.
- For application by brushing, an acrylic brush is recommended. Rolling is done using a short hair roller.
- Carefully cover and mask areas which are not to be coated.
- 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. Deviations lead to film and adhesion problems as well as to impairments with regard to weathering and color stability.

**Brushing** 

0 - 10

Rollina

Cup qun

1,8 - 2,0

3 - 4

# Application technique







- Pr. m.)		
Diluent	Water	
Diluent amount added (%)	10 – 20	0
Applied quantity per application (ml/m²)	100 – 125	

The product is ready to use.

Spraying nozzle Ø (mm)

Spraying pressure (bar)

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)



Re-coatable at room temperature	approx. 6 hour(s)
Final hardness	approx. 7 day(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.

Avoid direct sunlight!

# Cleaning the working equipment





With water immediately after use.

To remove dried product residues we recommend using Abbeizer Express (8313).

	SUBSTRATE	
Type of substrate	Wood, wooden materials, metal as well as hard PVC	
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.	
	Remove old coatings that cannot be recoated.	
	Please observe the additional documents:	
	<ul> <li>ÖNORM B 3430-1</li> </ul>	
	● ÖNORM B 2230-1	
	• DIN 18363	
	<ul> <li>Current BFS information sheets</li> </ul>	
Wood moisture	Hardwoods: 12 ± 2 %	
	Softwoods: 15 ± 2 %	

#### Substrate preparation

#### 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

#### 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).

#### Old coatings:

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

	COATING SYSTEM
General	The following coating systems are exemplary.
Impregnation	Wood and wood-based materials:
	If necessary, impregnate outdoors once with Pullex Aqua-IG (5357) (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 <b>ARL 056 - Working guideline for the use of wood preservatives.</b>
Primer coat	Wood and wood-based materials:
	For colored shades: 1 x ADLER Varicolor (4117)
	<b>White &amp; pastel colours:</b> 1 x Aqua-Isoprimer PRO (4123) or Aqua-Isoprimer CT PRO (4162) for optimum insulation
	Iron and steel:
	Indoors: 1 x ADLER Varicolor (4117)
	Outdoors: Apply 1 saturated coat of ADLER Varicolor E20 (4139) blended (optionally Aqua-Multiprimer PRO (4129) can be used)
	Zinc, aluminium and other non-ferrous metals:
	1 x ADLER Varicolor (4117)
	Sand anodised aluminium and stainless steel very well until matt and prime within 60 minutes with 2K-Epoxy-Grund (5604).
	Hard PVC and coatable plastics:
	1 x ADLER Varicolor (4117)
	Due to the large number of plastic materials, an adhesion test is recommended.
	Old coatings:
	No primer coating is required for intact old coatings, but the compatibility of the coating must be checked.
	Damaged areas in not intact old coats must be pre-treated according to the respective substrate. Coating system like new paint.
	Powder coating:
	For powder coatings we generally recommend priming with 2K-Epoxy-Grund (5604). Make a sample and check adhesion.
	Please refer to the corresponding technical data sheets of the products.
Intermediate sanding	If necessary, grind the primed surface with grit size 240 – 280.
	Remove sanding dust.
Intermediate coat	1 x ADLER Varicolor (4117) (only necessary for iron and steel in outdoor areas)
Finishing coat	1 x ADLER Varicolor (4117)

	MAINTENANCE
Care	The durability depends on several factors: these include particularly the type of weathering, constructive protection, mechanical stress and the choice of colour applied. To obtain long durability, regular inspection, maintenance and, if necessary, repair measures are necessary.
	If required, remove dust and dirt from the still intact areas and paint $1-2\mathrm{x}$ using ADLER Varicolor (4117).
Maintenance	When renovating the outer surface of dimensionally stable wooden construction elements (windows and front doors), the coating on the inside must be checked and, if necessary, coated with the same system.
	Please follow our ARL 304 - Working guideline for coating dimensionally stable and limited dimensionally stable construction elements - Maintenance and repair.
	ORDERING INFORMATION
Size of trading unit	125 m] (only standard colours)
-	375 ml; 750 ml 2.5 l (for standard colours only RAL 6005 and RAL 9005) 10 l (only White, tintable)
Colour shades / Glosslevels	<b>Standard colour(s):</b> Weiß, tönbar (4117049100) RAL1021 Rapsgelb (4117001021)
Color4You :	RAL3020 Verkehrsrot (4117003020) RAL5010 Enzianblau (4117005010) RAL6005 Moosgrün (4117006005) RAL7016 Anthrazitgrau (4117007016) RAL7035 Lichtgrau (4117007035) RAL8011 Nussbraun (4117008011) RAL9001 Cremeweiß (4117009001) RAL9005 Tiefschwarz (4117009005) Farblos, Glänzend (4161050252)
	Other colour shades can be obtained using the ADLER colour mixing system Color4You.
	Base paint(s): ADLER Varicolor Weiß, tönbar (4117049100) ADLER Varicolor Basis W15 (4117000015) ADLER Varicolor Basis W20 (4117000020) ADLER Varicolor Basis W30 (4117000030) ADLER Varicolor Basis Gelb (4117050087) ADLER Varicolor Basis Rot (4117050088) ADLER Varicolor E20 Basis E20 (4139071555)
	In order to ensure uniformity of the colour shade, use only material with the same batch number on a given surface.
	It is recommended to prepare a trial colour sample on the original substrate using the coating system selected in order to assess the final colour shade.
	Depending on the system, brilliant and intensive color shades may have a lower covering power. Hence, it is recommended to apply a preliminary coat of a comparable, opaque and pastel colour shade based on W15.
	Please consume blended products within 12 months.  Please observe our ARL 800- Working guideline for working (including care and maintenance) with ADLER Mix, PUR Mix and Color4You dosing machines.
Supplementary products	2K-Epoxy-Grund (5604) Abbeizer Express (8313) ADLER Histo-Base (5497) ADLER Histo-Protect (5097) ADLER Varicolor Farblos (4161)

Aqua-Isoprimer CT PRO (4162) Aqua-Isoprimer PRO (4123) Aqua-Multiprimer PRO (4129) Ferrocolor (4506) Ferro GSX (4505) Pullex Aqua-Color (5325) Pullex Aqua-IG (5357) Pullex Color (4403)

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: Limit value according to Directive 2004/42/EC for ADLER Varicolor (Cat A/d): 130 g/l. ADLER Varicolor contains a maximum of 50 g/l VOC.

# Giscode

BSW20

# Declaration of ingredients according to VdL-RL 01

acrylic dispersions / inorganic white and coloured pigments / organic pigments / mineral agents / anti-corrosion pigments / water / glycol ether / rheology additives / interface additives / wetting agent / neutralising agents / in-can preservation agents

Contains 1,2-benzisothiazol-3(2H)-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May cause allergic reactions.

Information for allergy sufferers under telephone no. +43 5242 6922-713.

# **Safety information**



The usual protective measures must also be observed when processing low-pollutant products.

During sanding use P2 / P3 dust filter. Do not inhale spray mist. Use combination filter A2 / P2 and safety goggles.

If medical advice is needed, have the packaging or label ready.

If the product comes into contact with your eyes, rinse immediately with water.

It should be kept out of reach of children.

Ensure good ventilation during application and drying.

During work, do not eat, drink or smoke.

Do not allow to enter drains, water courses or soil.

Only dispose of empty containers for recycling, liquid material residues can be disposed of as water-based paint waste, dried material residues as hardened paint or as household waste.

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 **www.adler-lacke.com**.