

# MATERIAL- DATA SHEET

## RHEINZINK-GRANUM basalte



- **DARK PHOSPHATED SURFACE**
- **NOBLE, MATT LOOK WITH ZINC TYPICAL STRUCTURE**
- **DURABLE AND WEATHER RESISTANT**
- **EXCELLENT PROCESSABILITY**

## BASIC-INFORMATION

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The RHEINZINK-GRANUM product line stands for a noble, matt appearance. Characteristic for GRANUM is its durable phosphate coating, which gives an idea of the zinc-typical structure of natural patina. GRANUM-basalte is the dark phosphated surface variation, which presents itself puristic and timeless in its dark grey, almost black version. The environmentally friendly material offers weather-resistant protection for an everlasting aesthetic.

Specific weight 7.2 g/cm<sup>3</sup>

Building material class A1 (non-combustible)

Titanium zinc according to DIN EN 988

## DELIVERY FORM

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Standard widths	500 – 600 – 650 – 670 – 1000 mm
Standard thicknesses	0.65 – 0.70 – 0.80 – 1.00 mm
Protective film	Standard
Coil inner diameter	508 mm at > 500 kg 400 mm at < 500 kg

## IMPORTANT INSTALLATION INSTRUCTIONS

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Bending radius	Minimum 1.75 mm, from 1.00 mm on 1.75 x t
Soldering recommendation	Soldering flux "ZD-pro" (company Felder), remove the coating abrasively, overlap area 10 to 15 mm
Processing temperature	Warming up in temperatures below 10 ° C
Protective film	Remove the film immediately after assembly

*Note:*

*In the event of contamination due to external or environmental influences, please request the RHEINZINK cleaning recommendations. With these recommendations, RHEINZINK cannot guarantee that a new look will be created.*

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RHEINZINK-GRANUM  
basalte

BASALTE

GRANUM basalte

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## ALLOY

Zinc	99.995% (Z1 according DIN EN 1179)
Copper	0.10 – 0.20%
Titanium	0.07 – 0.12%
Aluminum	≤ 0.015%

## CERTIFICATION

Quality management	Certified according to EN 988
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## MECHANICAL-TECHNOLOGICAL PROPERTIES

0.2% proof stress (Rp0.2)	≥ 110 N/mm <sup>2</sup>
Tensile strength (Rm)	≥ 150 N/mm <sup>2</sup>
Breaking elongation (A50)	≥ 40%
Vickers hardness (HV3)	≥ 45
Folding test	no cracks on the bending edge
Bending back after folding test	no cracks after bend break
Erichsen cupping	≥ 8.0 mm
Permanent elongation in creep (Rp0.1)	≤ 0.1%

## PHYSICAL AND CHEMICAL PROPERTIES

Melting point / range	420 °C
Boiling point / range	906 °C
Recrystallization limit	> 300 °C
Density at 20 °C	7,2 g/cm <sup>3</sup>
Expansion coefficient	
In the longitudinal direction	22·10 <sup>-6</sup> K <sup>-1</sup>
In the rolling transverse direction	17·10 <sup>-6</sup> K <sup>-1</sup>
Thermal conductivity	110 W/m·K
Electrical conductivity	17 m/Ω·mm <sup>2</sup>

RAL colour*	RAL 9011
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\* Color values are approximate values in the delivery condition, deviations in the surface treatment process are possible.