

BECORIT BM 40

Description

- Sintered pad material for high thermal loads

Material characteristics

- High and constant friction level at high speed

Application

- High speed vehicles
- Special freight cars
- Locomotives



BECORIT BM 40

Physical properties

mean coefficient of friction (for calculation) ¹⁾ $\mu_m = 0,40$

specific pressure ²⁾ $p \leq 150 \text{ N/cm}^2$

friction rubbing speed at the brake radius ²⁾ $V \leq 55 \text{ m/s}$

temperature sustained ²⁾ $\vartheta = 500 \text{ }^\circ\text{C}$

temperature momentarily $\vartheta = 900 \text{ }^\circ\text{C}$

density $\rho = 5,12 \text{ g/cm}^3$

compressive strength $\sigma_{\text{ab}} = 42 \text{ N/mm}^2$

modulus of elasticity $E = 930 \text{ N/mm}^2$

hardness $\text{HRR} = 60 \text{ N/mm}^2$

thermal conductivity (standard value) $\lambda = 24 \text{ W/(m}\cdot\text{K)}$

specific heat capacity (standard value) $c_p = 0,5 \text{ kJ/(kg}\cdot\text{K)}$

¹⁾ Coefficient of friction tolerances acc to UIC-leaflet 541-3 VE

²⁾ Coincidence of the max. values may create other results

Material description

- sintered friction material on copper base without asbestos, lead

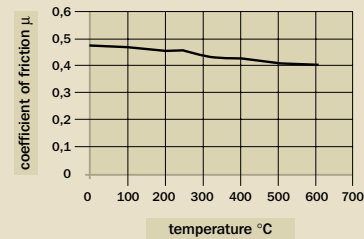
Range of application

- for speeds up to 350 km/h

Disc material

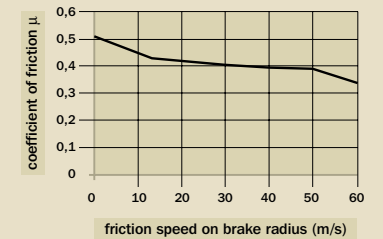
- steel alloy

The information provided in this data sheet should be used for general guidance on the performance of this material. It does not represent the performance under all service or Dynamometer test conditions. The performance of this material may vary depending on the application in which it is used. Selection of this material for any application should only be made following discussion with the BECORIT Technical department following which Dynamometer testing to a specific duty cycle may be necessary prior to a final selection being made. Becorit GmbH cannot be held responsible for any errors arising in brake system design should a friction material selection be made on the basis of data sheet information alone.



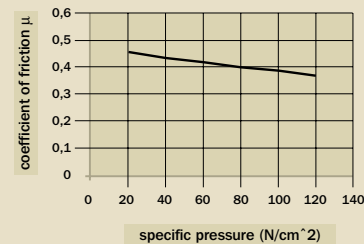
$V = 15 \text{ m/sec}$

$p_{\text{spec}} = 80 \text{ N/cm}^2$



$p_{\text{spec}} = 80 \text{ N/cm}^2$

$\vartheta = 50 \text{ }^\circ\text{C}$



$V = 15 \text{ m/sec}$

$\vartheta = 50 \text{ }^\circ\text{C}$