

# FE100.29

CHEMICAL STORE, INC.

FE100.29 is a high purity atomized iron powder with very high compressibility and good dimensional stability frequently found in automobile electromagnetic parts.

## Typical data

Apparent density, g/cm <sup>3</sup>	Flow, sec/50g
2.98	25

## Sieve analysis, %

+ 212 $\mu$ m	0
+ 150 $\mu$ m	7
- 45 $\mu$ m	23

## Compressibility, g/cm<sup>3</sup>

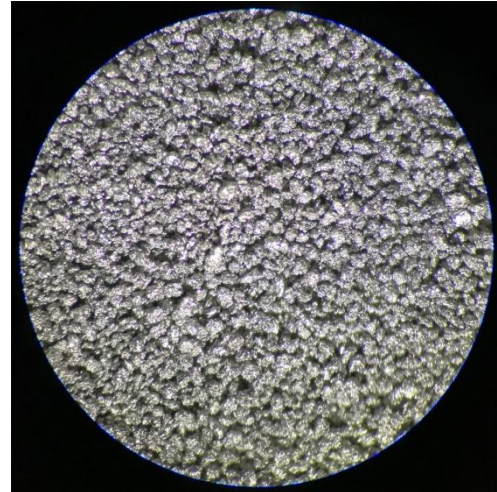
Compacting pressure	Lubricated die	0.6% Kenolube <sup>®</sup>	0.8% Zn-st
400 MPa	6.77	6.79	6.82
600 MPa	7.20	7.19	7.17
800 MPa	7.45	7.36	7.31

## Green strength, MPa

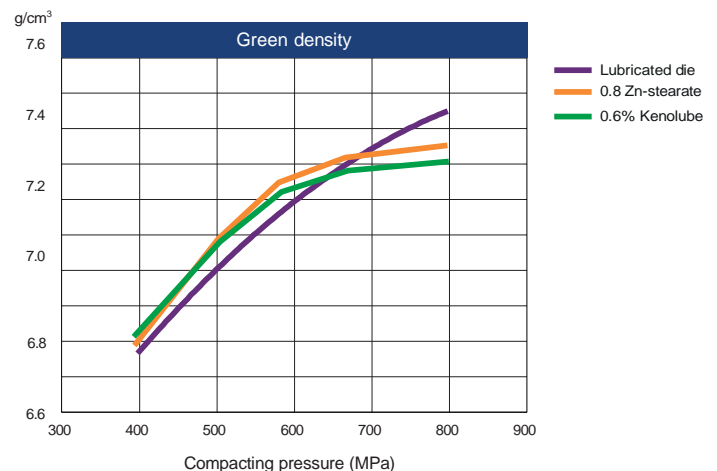
Compacting pressure	Lubricated die	0.6% Kenolube	0.8% Zn-st
400 MPa	21	14	9
600 MPa	34	21	14
800 MPa	50	24	16

## Chemical analysis, %

Carbon	<0.01
O-tot	0.08
Fe is the Base	



The 100X magnified image of FE100.29 show well distributed clump particles of 150  $\mu$ m and smaller that can deform while being compressed to create a dense part with high green strength even without using lubricants. Fe100.29 can be used in production of high precision small parts with high magnetic permeability and I Low coercive force. FE100.29 is one of the highest purity elemental iron.



## Disclaimer

All information, recommendations and suggestions in this document are based on sources believed to be reliable; however, it is the user's responsibility to determine safety, toxicity and suitability of this product in their own application.