

Prime Western (PW) Zinc - 98.65%



Chemical Specifications

Component	Guaranteed Content	HZL Typical
Zinc (Zn)	98.65% Min	98.70% Min
Lead (Pb)	1.23% Max	1.20% Max
Copper (Cu)	0.020% Max	0.0150% Max
Cadmium (Cd)	0.020% Max	0.0050% Max
Iron (Fe)	0.020% Max	0.0180% Max

Hindustan Zinc Prime Western Zinc 98.65% conforms to the following standard:

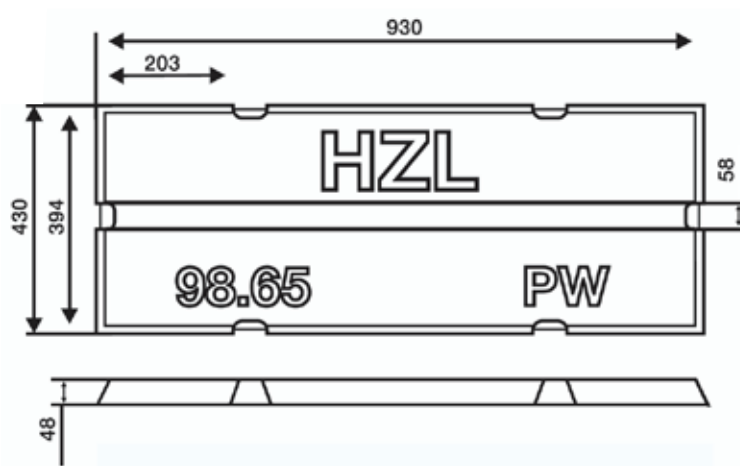
BS EN 1179 (Z5 Grade) & IS 13229 - 2011 (PW Grade)



Bundle Specifications

Ingot Weight	: 25 Kg each (+ /-2 Kg)
Bundle Weight	: 1000 Kg each (+ /-50 Kg)
Bundle Top Layer	: 4 Ingots/Layer x 9 Layers
Bundle Bottom Layer	: 2 Ingots/Layer x 2 Layers
Bundle Dimensions	: 920 (+/-10) mm Length
	: 453 (+/-10) mm width
	: 521 (+/-10) mm height

Slab Dimensions and View



Physical Specifications: All Dimensions in mm

Some facts about Prime Western Zinc Grade

Prime Western Grade Zinc confirms to Zinc Grade as defined by the Standard IS 13229-1991 (reaffirmed) 2011)

- PWG's worldwide suitability for structural steel galvanizing is confirmed in the international standards for galvanizing such as ISO 1461. These require the molten zinc to be 98.5% minimum zinc content
- BIS 13229 now references 98.65% as a minimum zinc purity grade and which is deemed suitable for galvanizing.
- PWG is usually specified as 98.5% minimum zinc content. However, HZL PWG is 98.65% minimum zinc content (please see the table). It is technically a Zn-Pb "alloy". HZL PWG contains Lead typically up to 1.23% Lead content

From a technical perspective, PWG Zinc is a "Natural" choice for Galvanizers who use Lead in the bottom of their kettle due to its Zn+Pb alloy composition. This is explained more below

PWG Zinc for Galvanizing - A Technical Overview

It is a common practice to operate galvanizing baths with a layer of molten Lead (Pb) at the bottom for the purpose of easier dross removal.

While the benefit of the Pb layer is well recognized, what is sometimes not recognized is that Pb from this layer will be continually absorbed by the surrounding molten Zinc, if pure Zinc additions are made to the bath. This is because Pb is soluble in molten Zinc upto about 1.4% Pb maximum content at normal Galvanizing bath temperatures. Consequently, even though pure Zinc may be added to Galvanizing bath, this natural absorption of Pb causes the molten pure Zinc to be converted to Zn + Pb alloy.

Another aspect to note is that since PWG already contains Pb upto the maximum solubility content, there can be no further absorption of Pb into it. Consequently, the bottom Pb layer in the galvanizing bath, will not be consumed over time if PWG Zinc is used. In contrast, adding SHG 99.995% Zn, or other relatively "pure" grades of Zinc to the bath will require that compensating addition of Pb ingot will need to be in order to maintain the molten Pb layer at its required desirable thickness. These compensating Pb ingot additions represent an additional cost burden which can be served by using PWG Zinc.

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