



Perfect EQUIPMENT

ZINC LEARN THE FACTS

Zinc is essential for the normal healthy growth and reproduction of plants, animals and humans.

The world is naturally abundant in zinc. It is estimated that the first mile of the earth's crust under land contains 224-million ton of zinc. In the order of material abundance on earth, zinc ranks 25th.

Between 1.4 and 2.3 grams of zinc are found at any given time in the average, healthy adult. The U.S. Recommended Daily Allowance is 15 milligrams of zinc.

Zinc is the third most used non-ferrous metal (after aluminum and copper), of which the U.S. consumes more than one million metric tons annually; the average person will use **730 pounds of zinc in his or her lifetime**, according to the U.S. Bureau of Mines.

Zinc can be found everywhere we look:

- **Corrosion Coatings** – This is the number one usage of zinc. Nearly all manufactured steel is coated with some type of zinc based corrosion coating, **including nearly all steel wheel weights on the market.**
- **Tires** – Nearly every tire features more than ½ pound of zinc, needed to cure rubber.
- **Shampoo** – Many dandruff shampoos utilize zinc as their active ingredient.
- **Toothpaste** – The American Dental Association sites zinc as a gingivitis preventative, as well as aiding in the reduction of bad breath and tarter build up.
- **Printer Ink** – Many printer inks utilize zinc as a fast-acting drier agent.
- **Toys** – Hot Wheels® & Matchbox® cars have been made from die-cast zinc since the mid 1950's.
- **Zippers & Buttons** – Original Levis® 501 jeans feature zinc fly buttons and have for nearly 70 years.
- **Portable Device Docks** – Apple® iPad® charging docks, and many accessories with mounting docks, feature a zinc-filled base.
- **Medicines** – Zinc deficiency is a serious condition in third world countries. Zinc supplements help save lives. Zinc supplements can also help fight infections and heal wounds faster. Learn more at www.zincsavekids.org.
- **Shaving Razors** – Many of today's popular shaving razors utilize zinc in their manufacturing process.
- **Sun-Block** – Many sun-blocks utilize zinc as the active ingredient to bounce UV rays.
- **Locking Mechanisms** – Nearly all seat-belts feature zinc die-cast interiors, as well as Schlage® deadbolts and door knobs
- **U.S. Penny** – 98% zinc with a copper coating

Zinc is 100% recyclable. Over 80% of the zinc available for recycling is currently recycled. More than one-third of the zinc consumed in North America is produced from recycled materials.

Zinc makes the average automobile last longer. The average vehicle features 17 pounds of zinc to protect it from rust, 20 pounds are used to make zinc die-cast parts like door handles and locks, and each tire contains about 1/2 pound of zinc, needed to cure rubber.

Among the conclusions of an extensive report on zinc in the environment and human health by the World Health Organization is the following, "The essential nature of zinc, together with its relatively low toxicity in humans and the limited sources of human exposure, suggests that **normal, healthy individuals are at potentially greater risk from the adverse effects associated with zinc deficiency than from those associated with exposure to zinc.**"

Toxicity of zinc is low; zinc deficiency represents, however, a hazard for human health. Zinc is not mutagenic and has little, if any, clastogenic properties.

The environmental impact of zinc – and of all essential elements – cannot be assessed in the same way as man-made chemical compounds, such as steel. Because zinc occurs naturally, eliminating it from the environment would not be possible. Moreover, because zinc is essential, achieving such a goal would ultimately lead to detrimental effects throughout the ecosystem.

In other words, "less" is not necessarily "better" as far as zinc is concerned.