



*Manufacturing of Various Forms  
Of Lead Alloys*

# Index

- [Pure Lead](#)
- [Lead Alloy Manufacturer in India](#)
- [Selenium Lead Alloy Manufacturers: Get Quality Selenium Alloy at Affordable Prices](#)
- [Red Lead Manufacturer: A Different Form Of Lead](#)
- [Lead Monoxide Manufacturers: Get the Lead of Highest Quality](#)
- [Lead Alloy Manufacturer Mass Production of Lead Alloy India](#)

## **Pure Lead**

Pure lead is a ductile, heavy, greyish and soft metal that can be easily casted as well as fabricated into different forms like alloys and can be used for diverse reasons like storage batteries, production of plumbing materials, pigments, antiknock gasoline and ammunition. This metal has the impressive resistance to anticorrosion and that is why it is one of the most vital components used in the manufacturing of automobile parts.

Storage batteries made from [pure lead alloy](#) are used across the world for the purpose of baggage carts and forklifts that are used in the manufacturing and building industries. When pure lead is oxidized, we get lead oxide as the resultant product. This is generally recognized as grey oxide, red lead or Lead Tetroxide, and metallic lead. All these come under the family of lead oxides but have different uses and colours. Apart from these, pure lead is also an essential product for paints, pesticides, ceramic glazes, occupational, petrol and cigarettes. It is also extensively used in making automobile parts, engine parts and other vital parts present in automobiles.

## **Grey oxide**

Grey oxide is used extensively in the preparation of lead acid batteries. These batteries are primarily used in the ferromagnetic as well as ferroelectric materials. This in turn helps in producing different items like enamels, inks, and lead glass and lead stabilizers.

## **Red lead**

This is used principally for providing protective layer to combat the problem of corrosion. It is used in pesticides and paints.

## **Preparation of Pure Lead**

[Pure lead manufacturers](#) make use of advance process for producing this highly used metal. In order to produce lead in its pure form, firstly, lead oxide is calcined and thereafter desulfurized. This helps in getting the concentrated solution that comprises of alkali hydroxide. The separated solution is brought in contact with the ketone and as a result, we get a-lead oxide. The solutions obtained from ketone and alkalis are recycled during the process so that we get the preferred alkali constituents for the potassium hydroxide and sodium hydroxide.

One of the greatest pure lead manufacturers is Met Trade India Ltd [www.mettradeindia.com](http://www.mettradeindia.com) which is an ISO 9001-2000 company and uses the latest hi-tech technologies to produce the pure lead. This pure lead manufacturer is registered with the ministry of environment and forest and thus, always provides quality products of pure lead without damaging our environment. Met trade India Ltd

also has separate service divisions for recycling and logistic services so that the waste products can be recycled and can be used in different areas.

### **Lead Alloy Manufacturer in India**

Because of the fact that lead is extremely soft, elastic and ductile, it is commercially used in the form of lead alloys. Its common elements of alloying are Tin, Calcium, Arsenic and Antimony.

Antimony is generally used for providing greater strength and hardness which is required in sheets, pipes, castings and storage battery grids. Arsenic lead is used in chemical sheathing as Arsenic is able to harden the lead-antimony alloys and is required in the production of a round dropped shot. Lead-antimony alloys have been replaced by Lead-Calcium alloys in many applications, especially in casting applications and storage battery grids. Recently, Aluminum is added to Calcium-Tin-Lead and Calcium-Lead alloys to work as stabilizer for the Calcium.

By adding Tin to the Lead and its alloys, it becomes helpful in increasing its strength and hardness and the lead-tin alloys are commonly used for their properties of good melting, wetting and casting, as in solders and type metals. As unalloyed Lead does not have good wetting properties, Tin gives it an ability to easily wet and also bond with the metals like Copper and Steel.

**Types of lead alloys:** The [lead alloy manufacturers](#) in India manufactures both kinds of lead alloys which are head lead and soft lead. Soft lead is the pure lead is a lead alloy. One or more metals are added to soft lead in order to make it harder and thus capable of molding.

**Procedure of manufacturing lead alloys:** With the help of state-of-the-art plants, a lead alloy manufacturer in India like [www.mettradeindia.com](http://www.mettradeindia.com) is able to manufacture different lead alloys in accordance with stringent determined specifications such as calcium, selenium, antimony, and arsenic. The kettle pots in the plants range from 20 to 100 metric tones per batch in capacity and are accompanied by highly efficient furnace oil burners having arrangements of pre-heating. The process of alloying is performed under control of spectrometer and the conclusions are confirmed via alternative methods of analysis such as atomic absorption spectrophotometer and web analysis. By making continuous investment in the plant and the technical resources, the service requirements and diverse applications are met effectively.

### **Precautions while manufacturing lead alloys**

When poured in a mold, a lead alloy will freeze or solidify at certain temperature while soft lead or pure lead will still be fluid. While manufacturing hard lead, a [lead alloy manufacturer](#) must keep in mind that it requires more efforts and experimentation than pure lead and it can work well for certain large and medium lures and sinkers. But its usage should be avoided in difficult to mold spinner baits and small jigs. It should not be used for making sinkers such as pinch-on types and

split shot types. Lead alloys will make such sinkers extremely stiff that they will not be able to bend and work correctly.

### **Selenium Lead Alloy Manufacturers: Get Quality Selenium Alloy at Affordable Prices**

Selenium lead alloys are quite in demand these days owing to various uses they can be put to and the amazing properties that they exhibit. The selenium lead alloys possess great conductivity, have amazing tensile strength and also exhibit great grid density. The water consumption is also very low and the antimony migration is also quite little. What is incredible about these alloys is that they remain stable if there is a float charge, have no positive plate-growth and the cell voltage also remains consistent.

Selenium lead alloys show great resistance towards corrosion and virtually eliminate all inter-granular corrosion. There is absolutely superior cycling and there is a performance of deep discharge. There are incredible uses of this metal alloy that comprise making the tubular grids or the automotive grids, making pipes and sheathing of the electric power cable, the lining of the tanks, batteries, ammunition, anodes and many more.

A lot of industries are there that are involved in the manufacture of products where a lot of selenium lead alloy is required. As there are not much reliable companies that can provide with quality raw material, these industries always search for reputed and trusted [selenium lead alloy manufacturers](#). As they cannot find good manufacturers, most of the time they have to either compromise with quality, pay more than the actual cost or ship the raw material from abroad. If you are also such an industrialist who is looking for the [pure lead manufacturers](#) or the **selenium lead alloy manufacturers**, then **mettradeindia** is the end of your extensive search. Met trade India is an incredible company that deals in the manufacture of quality and reliable pure lead and selenium lead alloys so that you can easily avail as much raw material you want and that too at very affordable and reasonable prices.

Met Trade India believes in offering you with great quality products so that you are properly satisfied and maintain a very stringent quality standard regarding all their products. All the products that they offer are with duly updated technology and very cost effective as well. In order to contact them you simply have to visit their website and fill in the inquiry form given their, the inquiry form will ask for your basic details like name, address and contact information along with the order details. You can mention the product details, product code and measure and quantity it is required in. In fact, if you have any queries, you can ask them online as well via the same form.

For more information, please visit [www.mettradeindia.com](http://www.mettradeindia.com)

## **Red Lead Manufacturer: A Different Form Of Lead**

Red Lead is defined as a reddish oxide of Lead ( $Pb_3O_4$ ) used as a pigment in paints and in glass and ceramics. Chemically, it is  $Pb_3O_4$  (lead tetra oxide) – a water insoluble compound prepared by the oxidation of metallic lead of litharge.

This different form of Lead is bright red to orange – red powder is one of the most aged and commonly employed anti-corrosion pigment. Red Lead alloy guards iron and steel against rusting. Throughout the world, red alloy is the prime coat for most of the largest bridges as well as in steel structures of buildings built in the 20th century. These structures speak volumes about the strength of this alloy. Even in ships it was copiously applied. In the past, 85% [Red Lead Manufacturer](#) products (lead concentration = 85%) was used in steel surfaces. With advances in technology, red lead primers embracing as much as 95% to 98% Lead were utilized. Ceramics, glass, paints, diluted blend of nitric acid and hydrogen peroxide... are some of the other things in which this alloy is used.

Virtually this different form of Lead is insoluble in water and alcohol, although it is soluble in hydrochloric acid present in stomach. This toxic when ingested, dissolves in hydrochloric acid, glacial acetic acid, and diluted mixture of nitric acid and hydrogen peroxide.

If you have looking forward to investing in this alloy, contact Red Lead Manufacturer [www.mettradeindia.com](http://www.mettradeindia.com). This manufacturer of offers the best quality. Utmost care is put in the manufacturing process. Heat is scrutinized prior to pouring molten metal into the moulds. This guarantees adequate chemistry, grain size & dross content of the alloy. A unique batch is allocated to each heat and this is engrossed on every relevant ingot. Even the minutest detail is monitored within specified limits.

In addition to all this, a highly experienced and educated staff keeps a watch dog on the excellence. Experts from various fields look into the selection of raw material, the entire process and finally the dispatch and delivery of the product.

In order to book your order, all you need is to log on to the website and fill a form such as Full Name, Position, Email Address, Contact Number, Fax Number, Company, Address, City, Country, Zip/Postal Code, Company Website, Order Details such as Product Required, Your product code, MTIL Product Code, Quantity Required, Unit of Measure, Price, Currency, Order Number. Filling this form will take only ten minutes of your valuable time and this [Grey Oxide manufacturer](#) will deliver the product at your specified destination. You can also send your inquiry at [info@mtil.in](mailto:info@mtil.in)

## **Lead Monoxide Manufacturers: Get the Lead of Highest Quality**

Also known as Lead Oxide (Litharge), lead oxide yellow, massicot and litharge, lead monoxide alloy is made up of 98%-100% lead oxide and has the molecular weight of 223.21.

Some of the chemical and physical properties of Lead monoxide alloy made by a reputed [lead sub oxide manufacturer](#) are:

- Odorless
- Strong pH base
- Insoluble in the water
- 888°C melting point
- Incompatible with hydrogen peroxide, chlorine, fluorine, aluminum, combustible materials, reducing agents that are strong and metals that are chemically active.
- Hazardous polymerization does not occur
- Toxic fumes of metal can be formed if heated for decomposition.

This is a highly hazardous substance and can prove to be fatal if inhaled or swallowed. It can cause irritation to the skin, respiratory tract and eyes and the neurotoxin present in it affects the central nervous system, gum tissues, kidneys, reproductive system and blood of the human beings.

[Lead Monoxide Manufacturer](#) alloy is an active component in lead paints and is extensively used in the manufacturing of ceramic glazes and lead glasses. It is also a major ingredient in filling plates for manufacturing of the lead acid batteries. When mixed with glycerine, it becomes waterproof hard cement which can be used for joining the flat sides of glass and bottom parts of the aquaria. It can also be used for sealing the glass panels of window frames. It is also used in rubber vulcanization and in specific condensation reaction of organic synthesis. Lead monoxide alloy (Litharge) is also used in the cathode ray tube glasses for blocking the X-ray emission.

**Mettradeindia** is an India based company which offers high quality, cost-effective and innovative manufacturing processes of lead, silver and tin metals. It has refining as well as smelting facilities through which it can produce refined lead metals and also produce high-valued alloys of the metal as per the requirements of the customers. The company has sophisticated and well equipped laboratory with all the facilities needed to perform detailed analysis almost all the parameters of the products. It is one of the leading lead monoxide manufacturers in India as with the help of Optical Emission Spark Electro Spectro Meter; the company is able to properly carry out analysis of almost all metals including lead. The company has employed experts who are able to carry out widespread development and research and to

constantly upgrade the already existing products as well as to provide new applications and solutions. Because of their continuing efforts and positive attitude, the company has made satisfied a large number of customers till date. For more information, please visit [www.mettradeindia.com](http://www.mettradeindia.com)

### **Lead Alloy Manufacturer Mass Production of Lead Alloy India**

Lead is a useful metal as it can be used in a wide range of applications like in the making of cable sheets, pipes, battery grids, solders, ammunition, lead foil, coatings, anodes and fusible alloys. Lead alloys are used in such variety of purposes because it has a wide variety of useful properties that makes it a versatile metal. Lead alloys have low melting point, elastic modulus, thermal expansion and elastic limit. Another good attribute of lead alloys is that they have high resistance to corrosion. On the other hand, lead alloys show high density properties as they have a density of more than 11.35 g/cm<sup>3</sup> at room temperature.

Lead alloys have high flexibility, lubricity, hardness, strength, malleability and elastic limit. This is what makes it a better choice for casting as useful metal and alloys.

Moreover, [lead alloys manufacturer](#) are effective in providing shield against isolating equipment and deadening sound. Its high limpness as well as damping capacity is what makes it favorable for the use of structuring of mechanical vibrations.

The prime properties of softness, malleability as well as lubricity make the lead alloy useful in numerous areas of application. One of the most popular uses of lead alloys is connected with deformation of tensile strength. On the other side, another worldwide use is related with designing, inserting and supporting the alloying with other metals like calcium and antimony.

[Lead alloy manufacturer](#) products are also used in casting of products including gaskets, terne plate, bearings, type metal, foil and combinations. As lead alloys can easily provide protective shield against gamma rays, they are being used in the nuclear reactors as well as in the production of x-ray machines.

Lead alloys are also used in the fire sprinkler systems and in the fusible systems. This is because they have the alloying element of copper and steel that allows enhancement of machinability.

If you are looking forward to buy any of the products made from the constituents of lead alloys, [www.mettradeindia.com](http://www.mettradeindia.com) is the best company to approach. This is because the company is the leading manufacturer of quality products of lead and lead alloys. The best part is you can place your order online by filling up the online order form wherein you have to mention the credentials of product you are willing to buy.

For instance, mention all the necessary details like product number, product serial number, and address at which it has to be delivered.