

ASHOKA DE-Pb

ASHOKA DE-Pb Metal Soap is a special Hand washing Formulation. It quickly and efficiently removes heavy metal dusts, lead and contaminants from the skin and hands. The mild formula with skin conditioning coconut oil is designed for frequent clean up throughout the day.



Properties: -

- It is made for removal of Heavy metal contaminations from the hand and body arising from handling of such material like lead, cadmium, mercury and cobalt etc.
- It is ecologically benign. ASHOKA DE-Pb is totally biodegradable. It does not contain any harmful chemicals. It is perfectly safe for use on any external Part Of body.
- It is free from sulphates like SLS, SLES, ALS, and ALES etc.
- It does not penetrate skin to transport itself into blood stream.
- It is capable of removing 200 to 400 ppm of heavy metal residue by making it soluble.

Detail Chart: -

Product Code	ASHOKA DE-Pb	Normal Liquid Soap
Used For	Hand & Body & Cloths	Hand & Body
Heavy Metals	Lead, Cadmium, Mercury, & Cobalt etc.	Dust Particles
Metals	Excellent	Poor
Lead	Excellent	Poor
Skin Conditioner	Coconut Oil	Coconut Oil
Heavy Soils	Good	Poor
Embedded Grease	Good	Fair
Fragrance	Good	Good
Oil	Good	Good
Heavy Lubricants	Good	Fair
Cutting Fluids	Excellent	Fair
Ink	No	No
Common Adhesives	Fair	Fair
Pigments & Dyes	Fair	Fair
Latex Paint	Good	No
Oil Paint	Fair	No
Carbon Black	Good	Fair

Ashoka DE-Pb Test Kits for Lead Dust



Ashoka DE-Pb Test Kits are ready to use, fast, simple, portable and provide immediate results. This kit will detect as little as 20 micrograms of lead and can be used to detect lead on surfaces, respirators, tools, clothing and hands.

Use to promote better personal hygiene by checking for lead on hands after washing.

Use on respirators to check effectiveness of respirator cleaning procedures.

Test tables, chairs, vending machines, microwaves, key boards, phones, etc. for lead contamination prior to cleaning. After cleaning use to check the effectiveness of housekeeping and cleaning procedures.

The DE-Pb Test Kit is designed for detection of lead contamination on surfaces. This includes skin, clothes, tables, chairs, respirators, etc. Content of the kit: - a) Solution 1, b) Solution 2.

Hand Wash:

To wash contaminated hands, take small amount of Ashoka DE-Pb on wet hands and perform proper hand washing technique along with nail cleaning brush, then rinse several times with clean water.

Test Methods: -

Quick simple Direct Test Method: -

- a) Spray the Hand or other Surface 4 - 5 times with Solution 1.
- b) Spray the Hand or other Surface with Solution 2.
- c) If lead is present on the Hand or Other Surface it will show an immediate colour change to Yellow. It will show exactly where the lead is present on the surface or hand or the testing object.

Test pad method: -

- a) Spray one Entire side of a cotton test Pad 6 - 8 times with solution 1.
- b) Wipe the hand or surface to be tested.
- c) Spray the same side of test pad used for wiping hand with solution 2.

If lead is present on the Hand or Surface the test pad will show immediate colour change to Yellow thus showing a more Accurate result which may not appear on the hand of some people due to contrast which instead will be clearly seen on the test pad due to Contrasting background colour.

For More Accuracy: -

- a) Spray the Hand or other Surface 4 - 5 times with Solution 1.
- b) Spray the Hand or other Surface with Solution 2.
- c) After observing the result on the skin surface, use one side of the test pad to blot up all of the test solution. (Note: Here Test pad means Any tissue paper with good absorption capacity)
- d) The yellow colour is now transferred to the white test pad. this gives a much higher contrast than is visible on the skin to see the amount of yellow lead. Even when no yellow colour can be seen on the skin, the yellow colour sometimes will be visible on the test pad.

Cloths Wash:

To remove heavy metal residue, add 1/4 to 1/2 cup Ashoka DE-Pb Soap to contaminated laundry along with regular detergent. Use a second rinse cycle for best results. It has special ability to release metal particles from fabrics during the wash cycle. Concentrated cleaning agents, water softeners, whiteners and special brightening additives offer complete and vigorous one-step cleaning, thorough water softening, color safe brightening and effective metal decontamination.

Testing Method for Clothing: -

- a) First select the most contaminated area on the cloths which usually gets lead dust unknowingly during regular day today work.
- b) Spray the Clothing testing 4 - 5 times with Solution 1.

c) Spray the Clothing with Solution 2 on the same surface where we used Solution 1.

If lead is present on the Clothing Surface it will show an immediate colour change to Yellow. It will show exactly where the lead is present on the Clothing.

For More Accuracy: -

a) First select the most contaminated area on the cloths which usually gets lead dust unknowingly during regular day today work.

b) Place One test pad below the cloth which is to be tested and Spray it 8 - 9 times with Solution 1 so that the testing area of the cloth get wet then press it with other test pad from above keeping the first test pad below as it is so that the lead particle or dust present on the cloth settles on to the testpad placed below it.

b) Now remove the test pad place below the cloth and Spray it with Solution 2.

c) The yellow colour is now transfered to the white test pad. this gives a much higher contrast than is visible on dark shaded cloths to see the amount of yellow lead. Even when no yellow colour can be seen on the cloth, the yellow colour sometimes will be visible on the test pad.

Surfaces Wash:

To clean all contaminated surfaces, apply Ashoka DE-Pb to a brush or wet cloth. Thoroughly scrub area, then rinse several times with clean water.

What heavy metals does Ashoka DE-Pb Soap remove?

The soap will remove these heavy metals after careful washing for 15-20 seconds:

(Heavy Metal)	(Indication)
Lead	Yellow
Nickel	Bluish Green
Cobalt	Yellow
Cadmium	Pale Yellow
Mercury	Red to Yellow

Body Wash

As we have stated earlier it does not contain any harmful chemicals also its pH is balanced. It is perfectly safe for use on any external Part Of body.

To Clean whole body it can be used as body wash while taking bath as it contains moisturizer, also its sulphate free due to which it does not have any side effect which other sulphate body wash has. It can be used frequently in the shower and sink as normal liquid body wash for regular bath taking.

As it is Heavy metal removing soap it will quickly and gently cleans heavy metal dusts, lubricating oils and many other contaminants while it moisturizes the skin and provide you with lead free or clean & safer environment for you & your family.

For more about Lead facts & precautions read the lead fact sheet .

Hand Washing Technique: -



We highly recommend nail cleaning brush to be used regularly for washing hands along with nails so that lead particles can be completely removed from the nail which not done will result in intake of lead into our body through food or other similar means. The bristles of the brush are soft enough for proper cleaning of nail and will not harm in any way to the end user using it.



Lead Fact Sheet

Lead Hazards in the Workplace

Most adult exposures to lead are occupational and occur in lead-related industries such as lead smelting, refining, manufacturing, construction and painting. The probability of lead poisoning increases when workers inhale lead dust and lead fumes, or when they eat, drink, or smoke in or near contaminated areas. Between 0.5 and 1.5 million workers are exposed to lead in the workplace. Workers can accidentally expose family members by bringing lead dust home on their skin, shoes, and clothing. Lead brought home in this way is referred to as “take home lead.” People who work with materials that contain lead need to learn how they can protect themselves and their family.

What is lead?

Lead is a naturally occurring element that people have used almost since the beginning of civilization. Lead is bluish-gray in color and has no characteristic taste or smell. Lead has many different uses. A variety of human activities have spread lead widely throughout the environment, such as leaded gasoline. Efforts have been made to limit the use of lead containing products to minimize harmful effects on people and animals.

Who is at greatest risk for lead poisoning?

Employees working in a variety of occupational settings may be exposed to lead hazards. Some of these lead-related industries include:

- Painters and remodelers
- Battery manufacturing and recycling
- Automotive radiator manufacturing and repair
- Casting and machining lead, brass, bronze, pewter, and white metal
- Plating operations
- Manufacturing or the use of leaded paints, inks, dyes, glazes or pigments
- Lead soldering, such as in the electronics industry
- Gun firing ranges
- Ship building and repair
- Salvaging and recycling scrap metal
- Manufacturing ceramics
- Manufacturing leaded glass or crystal
- Manufacturing ammunition and explosives
- Compounding plastic resins
- Auto body repair
- Making stained glass

How does lead get into your body?

Most human exposure to lead occurs through **breathing or eating**. You can breathe in lead dust, mist, or fumes, and swallow lead dust on food, drinks, cigarettes, or your hands and face.

Once lead gets into your body, it can stay there for a long time. Lead can build up in your body if you are in contact with even a small amount of lead for a long time.

The more lead in your body, the more likely that harm will occur. How much damage lead does to your body may differ from one person to another.

If you are exposed to lead, many factors determine whether you will be harmed. These factors include the dose (how much), the duration (how long), and how you come in contact with it. You must also consider your age, gender, diet, family traits, lifestyle, and general state of health.

What does lead do to your body?

Lead affects many important body systems. Lead can damage the brain and nervous system, red blood cells, kidneys and reproductive systems of men and women. Lead easily crosses the placenta in a pregnant woman and can harm the fetus. Lead exposure can cause headaches, dizziness, sleep disturbances, memory loss, depression, fatigue, irritability, joint and/or muscle pain, miscarriage, and other serious health problems. **Damage from lead exposure can be permanent.**

The signs and symptoms of lead poisoning are often vague and can easily be confused with symptoms of other conditions. The blood lead level at which symptoms occur varies greatly from person to person. **Some people are poisoned by lead yet have few or no obvious symptoms.**

Why you should have a blood lead test?

You should have your blood tested if you work with lead or are employed in a lead-related industry. A blood lead test measures how much lead is in your blood at the time of the test. The amount of lead in your blood is measured in micrograms of lead per deciliter of whole blood ($\mu\text{g}/\text{dl}$). This type of measurement in your blood is called your Blood Lead Level, or BLL. The typical BLL for U.S. adults is less than 5 $\mu\text{g}/\text{dl}$.

What lead levels are considered elevated in adults?

The following list outlines some of the potential dangers of lead poisoning to health:

- From 1-20 $\mu\text{g}/\text{dl}$, lead is building up in the body and health effects may be occurring.

- From 20-30 µg/dl, regular exposure is occurring and there is evidence of potential health problems.
- At lead levels between 30 and 50 µg/dl, health damage may be occurring, even if there are no symptoms.
- Between 50 and 80 µg/dl, serious health damage may occur.
- At levels above 80 µg/dl, serious, permanent health damage or death may occur.

Blood lead levels can rise quickly. With frequent monitoring, dangerous exposures can be quickly identified and corrected. A blood lead level over 20 µg/dl indicates a substantial exposure to lead. There is also increasing evidence that adverse health effects can occur at BLLs below 20 µg/dl.

How can lead poisoning be prevented?

The best way to prevent lead poisoning is to remove the poisoned worker from lead exposure. This will allow the body to begin removing the lead. Sometimes adults with very high BLLs and serious symptoms will be treated with a drug to help the body remove lead. This is called “chelation therapy.” The need for chelation therapy is extremely rare. Only a licensed medical doctor (MD) with experience treating adult lead poisoning should make decisions regarding chelation for an individual.

Engineering Controls:

Another way to prevent lead poisoning is to prevent contact. Proper engineering controls (a local exhaust ventilation system, for example) are often the best way to control lead contact. Other ways of controlling lead exposure in your work-place include:

- Lead safety training
- Using lead safe work practices
- Switching to lead-free materials and/or controlling lead at the source

Using Respiratory Protection:

When engineering controls cannot reduce lead exposures to a safe level, you must wear a respirator. Your employer should have a respiratory protection program that includes fit-testing to make sure your respirator will protect you properly. You must also be trained to use and take care of your respirator. Using the respirator correctly will protect you from breathing in lead.

For more information regarding respiratory protection and fit-testing you can contact the Occupational Safety and Health Administration (OSHA).

Lead Safe Work Practices:

Following these simple rules when working with lead can help protect you and your family from lead poisoning.

- (1) Do not eat, drink or smoke in lead-contaminated work areas.
- (2) Wash your hands before eating, smoking, or touching your face after working with lead.
- (3) Wear your protective equipment over your clothing whenever you work with lead.
- (4) Shower, wash your hair and change into clean clothes (including shoes) before leaving the workplace. "Take home lead" can contaminate your vehicle, home, and potentially harm your family, especially young children.
- (5) Store street clothes in a separate area from your work clothes.
- (6) Eating a well-balanced diet with proper nutrition, can help reduce lead levels.

Signs & Symptoms:

<u>In Adults:</u>	<u>In Children:</u>	<u>Severe symptoms:</u>
<ul style="list-style-type: none">• headaches• joint pain• fatigue• muscle ache• nervousness• poor appetite• irritability• impotency• sleeplessness• decreased fertility• constipation• miscarriage	<ul style="list-style-type: none">• irritability• apathy• loss of appetite• abdominal pain• clumsiness• behavior problems• learning disability• constipation	<ul style="list-style-type: none">• nausea/vomiting• loss of balance• stupor• seizures• coma• blue tint to gums and skin under fingernails

In both adults and children, signs and symptoms are easily misdiagnosed. A child with lead poisoning may seem well. Symptoms usually do not develop until the condition is very serious. Symptoms of lead poisoning are easily confused with symptoms of other illnesses.