

**RENDER LEAD PAINT NON-HAZARDOUS.PERMANENTLY.**

# **LEAD LEAD PAINT STRIPPER OUT<sup>®</sup>**

an Environmentally Helpful Product



## Dear Valued Customer,

We are very excited about your interest in LEAD-OUT® Paint Stripper. Since 2007 we have been sharing this product with the world, including all 50 states, Canada, Europe, and Australia. LEAD-OUT® has been used by Fortune 500 companies including General Motors, Duke Energy, and Lockheed Martin as well as government agencies such as The Army Corp of Engineers, The U.S. Bureau of Reclamation, and the U.S. Navy. Thousands of people have enjoyed the benefits of one of the safest most effective methods of removing lead based paint available, and we hope you are one of them.

LEAD-OUT® Paint Stripper is a patented heavy metal remediating paint removal system. It is a combination of a top-of-the-line soy-based paint stripper and an EPA "SITE" (Superfund Innovative Technology Evaluation) proven heavy metal stabilizer. LEAD-OUT® reduces the toxic characteristics of lead and other heavy metals while safely removing coatings off any surface. The key ingredient is the stabilizer powder called Molecular Bonding System, or MBS®, which was developed and patented by Solucorp Industries, Ltd. MBS® was proven effective at the Midvale, Utah "superfund" site in 1997. Under the EPA "SITE" program, MBS® demonstrated permanent reduction of lead levels below federal hazard limits allowing treated soil to be left in place for future development. We have adapted this "superfund" technology for use on lead based paint and other heavy metal coatings such as zinc, cadmium, and chromium based coatings.

LEAD-OUT®'s soy-based paint stripper is specially formulated to carry the MBS® powder to remediate the lead inside the paint. The stripper is biodegradable, non-caustic, and able to remove multiple coats of paint in one application. We have combined two amazing products making this lead paint removal system go beyond "eco-friendly" to being an environmentally helpful product. We guarantee that lead will not leach out of your paint waste or your money back.

Yours truly,

Daniel Webster  
Peter Dallalah  
*Co-Founders, Managers*  
*Environmentally Helpful Products LLC*

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# WHY USE LEAD-OUT?



The federal limit for non-hazardous leachable lead levels is 5.00 mg/l, set by the Resource Conservation & Recovery Act. LEAD OUT® tackles the toughest lead problems by reducing leachable lead levels below 5.00 mg/l. All hazardous heavy metals are permanently remediated at the molecular level.

**Renders lead paint and other heavy metals non-hazardous for disposal**

**Reduces the toxicity of lead (See TCLP results on page 11)**

**Removes paint, varnish and urethanes of various types**

**Industrial strength paint stripper, removes multiple coats of paint**

**Non-toxic, biodegradable and no methylene chloride**

**Reduces or eliminates lead dust during lead paint removal**

**Easy containment for help with RRP clearance or OSHA regulations**

**Up to 120 sq. ft. of coverage per gallon**

**Remediates cadmium, chromium, zinc, and lead based coatings**

**Neutral pH – no need to neutralize the surface**

## From the EPA “Superfund” Report



Solucorp® developed a patent-pending system to reduce the leachability of heavy metals in soils, slags, and other solid wastes. Metal compounds are rapidly converted to less-soluble metallic sulfides. MBS® utilizes proprietary chemicals to treat the soil; soils can be excavated and treated in a pug-mill or in situ using soil mixing augers. The technology was demonstrated at the Midvale Slag Site in Midvale, Utah. Three waste streams, contaminated with arsenic (As), cadmium (Cd), and lead (Pb), were treated; approximately 500 tons of each waste was treated. A second test of 500 tons of one waste was conducted by Solucorp using EPA’s protocol and oversight contractor. **Toxicity Characterization Leaching Procedure (TCLP) leachable Pb concentrations were reduced to below the regulatory limit.**



# IS LEAD-OUT RIGHT FOR ME?

## Projects Big & Small

LEAD-OUT® Paint Stripper is an industrial paint stripper safe enough for use by DIY homeowners looking to remove lead paint hazards from their homes. The MBS® powder reacts with heavy metals at the molecular level and achieves a chemical containment. Lead and other toxic heavy metals will be rendered insoluble and non-leachable so you can dispose of the paint waste as regular waste without worrying that you are polluting the environment. We have tested these results by Toxicity Characterization Leaching Procedure (“TCLP”) and Multiple Extraction Procedure (“MEP”). These tests have proven that LEAD-OUT® Paint Stripper renders lead based paint non-hazardous by reducing the toxic characteristics of the lead. With the lead permanently contained within the paint waste, not only will it pass laboratory tests measuring toxicity and protect the environment, but it makes the lead paint removal job safer for you and everyone around the work site. Additionally, LEAD-OUT® saves you money in disposal costs.

## Home Owners

Under the EPA rules, homeowners do not have to maintain documentation of the non-hazardous lead levels of the paint waste they remove from their homes. For the safety of your household and the environment, we strongly recommend using LEAD-OUT® Paint Stripper for all DIY projects disturbing lead based paint in your home.

⚠ Always use standard personal protective equipment when using LEAD-OUT® Paint Stripper, such as gloves, protective eye wear, and coveralls to protect your skin.

## Contractors and Commercial Use

### Lead Paint Containment Under EPA and OSHA

EPA regulations under “RRP” and lead abatement rules require particular containment procedures. Using a non-toxic paint stripper is an acceptable paint removal method that helps with containment, but RRP requires documentation be maintained by the company demonstrating adherence to RRP containment procedures regardless of removal method.

LEAD-OUT® Paint Stripper is a thick gel stripper and will prevent lead dust from spreading during removal of the paint. Under RRP, all jobs involving removal or disturbance of lead based paint must document a final clearance by a certified inspector. With LEAD-OUT® Paint Stripper, this final clearance inspection will be easier to pass the first time, because little to no dust will be generated during the paint removal.

OSHA regulations also require procedures for containment of lead paint for the protection of workers. Using a non-toxic paint stripper is one of several methods recommended by OSHA to reduce worker exposure to lead during jobs that disturb lead based paint. LEAD-OUT® Paint Stripper will help contain the paint and help prevent worker exposure to toxic lead. We recommend companies incorporate our paint stripper into their written plans that are required by OSHA to help prevent worker exposure to toxic lead paint.

LEAD-OUT® Paint Stripper also limits lead exposure by chemical means: first, it converts leachable lead into lead-sulfide and other non-leachable compounds, and second it protects these compounds in an alkaline solution so even contact with acids will not cause the lead to leach out of the paint waste. A Multiple Extraction Procedure was conducted on treated waste, and demonstrated that LEAD-OUT®’s stabilizer powder can permanently prevent lead from leaching into the surrounding environment. Not only does LEAD-OUT® Paint Stripper prevent pollution of the environment from lead paint waste, but it can save your company money with non-hazardous disposal of lead paint waste.

**“LEAD-OUT®’s stabilizer powder can permanently prevent lead from leaching into the surrounding environment.”**



# HOW TO USE LEAD-OUT

! For optimum performance, apply when air temperature is over 50° Fahrenheit

## STEP 1

Open LEAD OUT® Stabilizer (Powder) package and mix thoroughly with LEAD OUT® Stripper (Gel). If using a sprayer, then strain the powder prior to mixing. The two components combine to make a semi-paste.

## STEP 3

Average dwell time from 5 to 24 hours. After 5 hours check by using a scraper if the coating is softened enough for removal. If not, wait longer and recheck softness.

## Surface Cleanup

After use; wipe surface with a damp wet-scrub pad to remove any remaining residue. Then soak the area with water using a sponge, towel, or water hose. Squeegee, mop, or wipe surface clean and let dry. Dispose of all waste responsibly.

## STEP 2

Use a paintbrush, trowel, airless sprayer, or other tool to apply. If using a paintbrush apply in one direction using an even stroke of the paintbrush (do not use back and forth motion) until LEAD OUT® is on the surface up to 1/8 inch in thickness.

## STEP 4

When treated area is ready, remove residue with a scraper or other stripping tool. You can also use pressure washing. Contain and clean-up all waste in a responsible manner.

## Storage

Store in cool, dry area. Apply LEAD-OUT® within 24 hours of mixing. When stored properly, the gel stripper and stabilizer powder can be stored for long periods of time. Separate stripper and stabilizer both have indefinite shelf-life.

# SIZED TO FIT YOUR JOB

1 Qt. Paint Stripper  
1/4 lb. MBS Powder

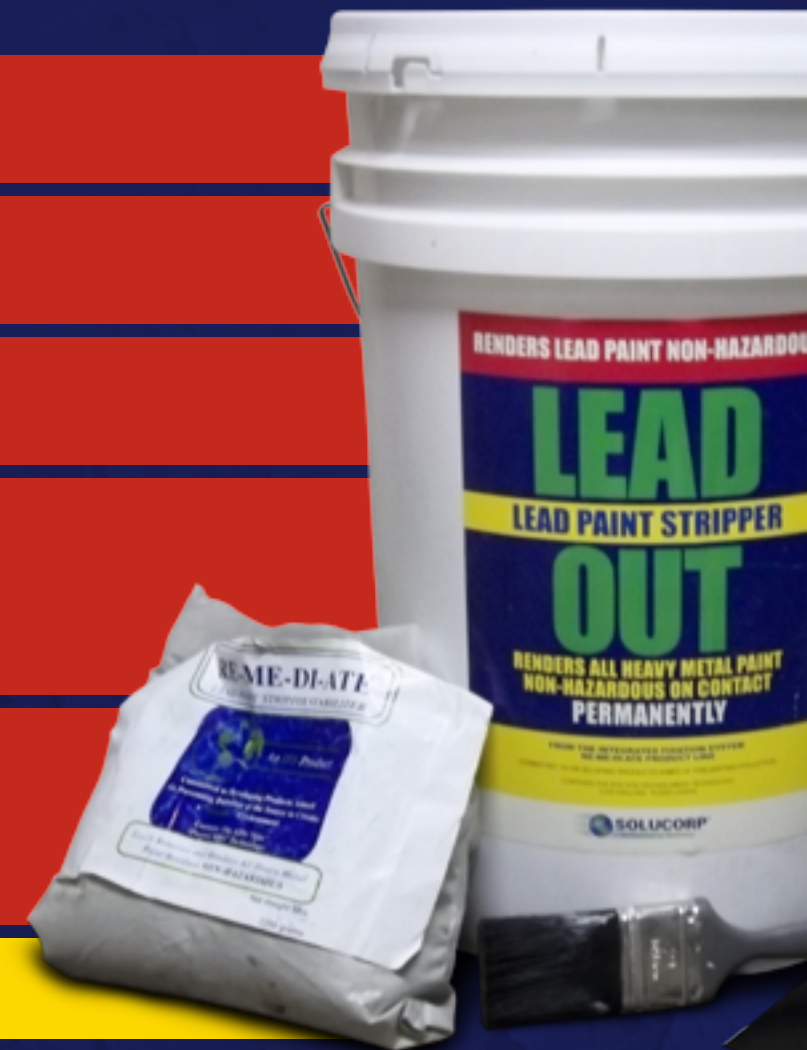
1 Gal. Paint Stripper  
1 lb. MBS Powder

2 Gal. Paint Stripper  
2 lbs. MBS Powder

5 Gal. PaintStripper  
5 lbs. MBS Powder

55 Gal. PaintStripper  
55 lbs. MBS Powder

+ Additional 1/4 lbs. of stabilizer powder available for purchase.





# LEAD-OUT TIPS

## Mix Thoroughly

Always mix powder and gel thoroughly until powder is dissolved into the gel stripper. Poor mixing will lead to poor adhesion to vertical surfaces or ceilings. If Lead-Out® seems too watery or runny, then continue mixing. You can let it stand for up to one hour to thicken. Do not allow it to dry out or it will be ineffective.

## Dwell Time

Allow as much time as needed, minimum of one hour, maximum of 48 hours.

## Poor Intercoat Adhesion

This causes premature lifting. LEAD-OUT® pulls paint off the surface by breaking chemical bonds adhering paint to wood or metal or other surfaces. Sometimes, poor adhesion between different layers of paint (i.e. latex paint on top of lead paint) causes Lead-Out® to begin lifting the paint at this layer and only softening the lower layer. This will happen quickly – within an hour or two – if at all. Scrape the top layer off and apply another layer of LEAD-OUT® to remove the bottom layer of paint.

## Application Thickness

More layers of paint require thicker application. Rough, porous, or absorbent surfaces require thicker application. One layer of lead paint on a metal surface can be removed with a thin application, 120 sq. ft. per gallon. Multiple layers of paint including different types of paint (i.e. latex or oil based) on a wood surface may require thick application, 60-80 sq. ft. per gallon. Use common sense and your best judgment when applying LEAD-OUT®.

## Paint Sprayers

Strain the powder and mix thoroughly to avoid clogs. Use an airless sprayer suitable for medium to heavy material. Do not use a filter. Recommended tip size is 619. Use a “popcorn” sprayer or “mud” sprayer.

## Mixing Ratio

The ratio is 1 pound powder to 1 gallon gel. So, ½ pound of powder can be mixed with ½ gallon of gel or ¼ pound to ¼ gallon. Unmixed stripper and powder can be sealed tightly (separately) and stored in a cool dry place. Shelf-Life: Indefinite.

## Epoxy

LEAD-OUT®, as it is formulated will remove some epoxies, but has a difficult time with some other epoxies. We have removed some pretty thick epoxies, but the dwell time exceeded 30 hours. Apply LEAD-OUT® at 1/8 inch for 35 hours for testing on epoxies. Covering it with plastic may extend the effectiveness of the stripper from 24 hours to 48 hours.

## Sun or Wind

Try to avoid direct sunlight or harsh winds. Dry weather can cause LEAD-OUT® to dry out too quickly. Possible solutions: apply LEAD-OUT® at night, cover with plastic, or erect a barrier to block sun and wind. Do not cover with plastic under normal conditions.

## Horizontal Surfaces

On horizontal surfaces, we recommend pouring Lead-Out onto the surface then spreading it with a brush or other tool.

## Leftover LEAD-OUT

Do not store after mixing. Use LEAD-OUT® within 24 hours of mixing. Dispose of any remaining LEAD-OUT® in same container as the lead paint waste.

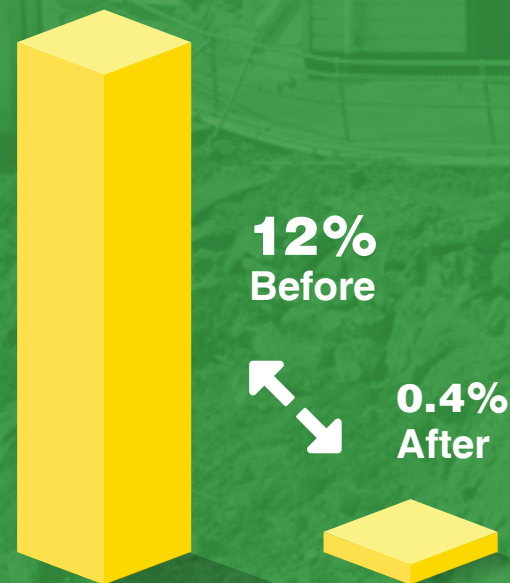
## High Concentrations of Lead

Adding more powder will neutralize more lead and other heavy metals. If your TCLP result is not satisfactory, you can purchase extra stabilizer powder by the ¼ pound. The stabilizer powder can be added to the gel-stripper at a maximum rate of 1.5 pounds per gallon. The normal ratio is one pound per gallon.

# POINT SUR LIGHTHOUSE

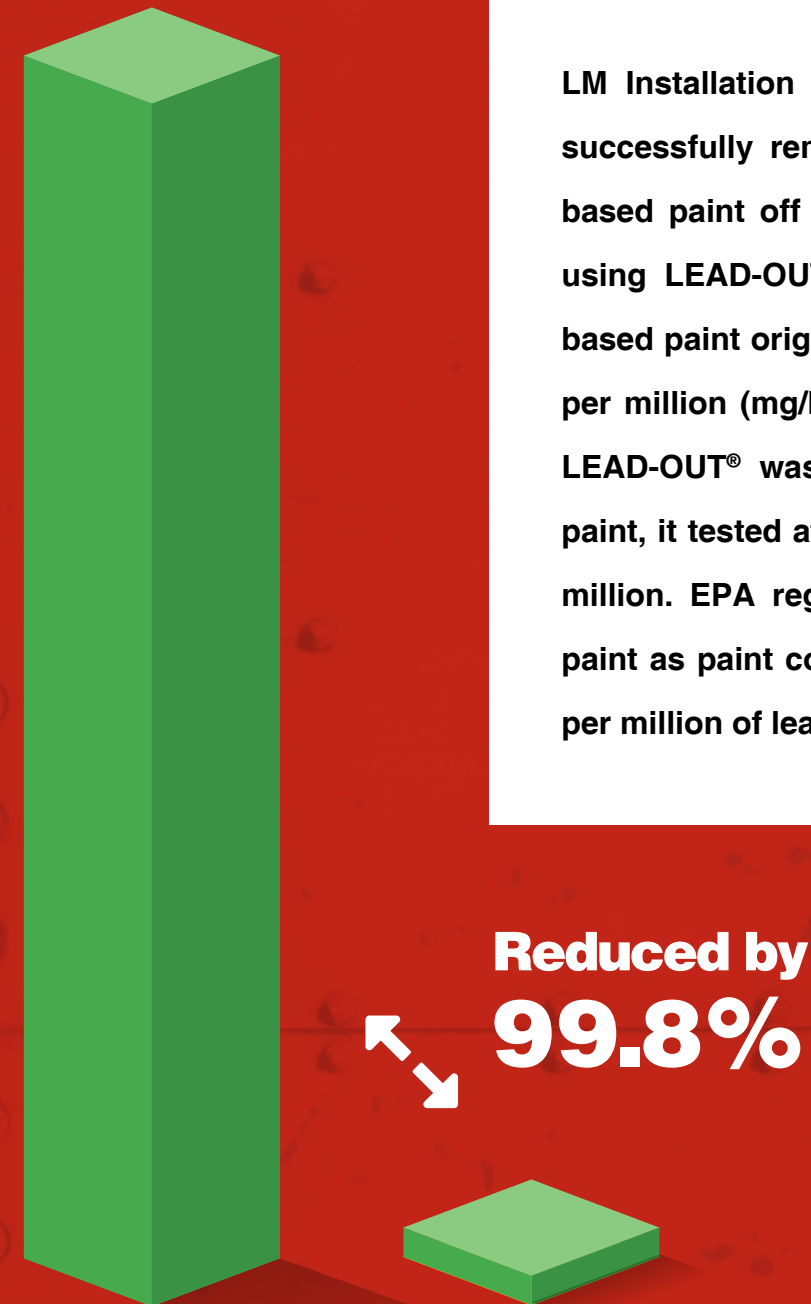
LEAD-OUT® Paint Stripper was used to successfully remove and remediate lead based paint in Big Sur and the Point Sur Lighthouse in California. The paint was tested by EPA SW846 test protocols, and the lab results showed 12% lead content by weight in the paint. The same lab using the same testing protocol tested the paint removed with LEAD-OUT®, and the results showed a reduction of lead content from 12% to 0.4% by weight. The paint waste was easily contained, and it was disposed of as non-hazardous waste.

*“...results showed a reduction of lead content from 12% to 0.4%...”*



# LM INSTALLATION

LM Installation out of Bainbridge, Georgia successfully removed and remediated lead based paint off a 2 million gallon fuel tank using LEAD-OUT® Paint Stripper. The lead based paint originally tested over 6800 parts per million (mg/kg) of hazardous lead. After LEAD-OUT® was used to remove the lead paint, it tested at approximately 95 parts per million. EPA regulations define lead based paint as paint containing at least 5000 parts per million of lead or 0.5% by weight.



# TCLP TESTED

*“...leachable lead levels were found to be non-detectable...”*

Untreated, flaking lead-based paint residues were mechanically removed from the metal structure of a derelict boat lift. These were tested by TCLP and found to leach in excess of 400 mg/l lead. LEAD-OUT® was used to strip this paint. The stripped residues were collected and submitted for TCLP testing, and leachable lead levels were found to be non-detectable, i.e., less than 0.010 mg/l.

**Before  
400 mg/l**

**After LEAD-OUT®  
<0.01 mg/l**

Thank you for your interest in LEAD-OUT® Paint Stripper

[www.LeadOutPaintStripper.com](http://www.LeadOutPaintStripper.com)

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