

Common Hazardous Wastes

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Auto shops use many products that contain hazardous ingredients. The following lists are meant to help identify which wastes may need to be handled as hazardous or require other special disposal outside of the standard municipal solid waste stream. The lists are a guide and not considered to be a complete representation of every hazardous material your workers may use. See the "Hazardous Waste Management" fact sheet for more information.

Common Hazardous Wastes Found in Auto Shops

A material may be regulated as a hazardous waste if it contains a substance that is listed by the EPA or MassDEP as a hazardous waste, or if it has the characteristics of a hazardous waste. See the fact sheet on Hazardous Waste Management for more information on how the regulations define hazardous wastes. You may have to consult an expert or have the waste tested to be sure. Substances that are not technically hazardous wastes may still present hazards and should be handled with care to prevent injury or releases.

Brake pads

Brake pads can either contain asbestos which is regulated by the U.S. DOT and EPA, or be high in copper, chromium, mercury, or cadmium which are heavy metals that must be managed as hazardous waste. Your shop can order brake pads that are labeled as 'asbestos-free,' 'low-copper' or composite alternatives that are less hazardous for your workers and the environment. Because it may be difficult to find out the composition of the brake pads on cars coming into your shop, we recommend managing these as though they do contain asbestos and are a hazardous waste. For more information on asbestos and auto repair, view the EPA's Current Best Practices for Preventing Asbestos Exposure Among Brake and Clutch Repair Workers.

Chemical paint stripper

These substances are usually corrosive, toxic, and possibly ignitable. Avoid using paint gun washers or other products that contain methylene chloride (MeCl). Methylene chloride is a probable carcinogen (cancer-causing agent) and was recently classified as a 'higher hazard' substance in Massachusetts due to its threat to the life and health of people who use it. There is no 'safe' level of exposure to carcinogens, and therefore, exposure should be limited to the lowest feasible concentration and amount. Even when air levels are within the acceptable OSHA Permissible Exposure Limits (PEL) in the air, skin absorption may lead to overexposure. Because methylene chloride quickly evaporates and has a low odor-detection threshold, once you can smell methylene chloride you are being over-exposed. Make sure your workers are aware of how dangerous this chemical is and choose safer alternatives. For information on methylene chloride, view the NJ Department of Health's Right To Know Chemical Hazards Fact Sheet in English or Spanish. Also, the Centers for Disease Control and Prevention offers this document with Questions and Answers: Methylene Chloride Control in Furniture Stripping.

Lead-acid batteries

If not recycled properly, lead-acid batteries contain highly corrosive and toxic materials like sulfuric acid and lead that should be managed as hazardous waste. Retailers often have collection and recycling programs for used batteries.

Lead wheel weights

Lead exposure can affect every organ in your body, and is most recognized for causing permanent damage to the brain. Lead wheel weights significantly contribute to lead pollution when they fall off cars and end up in storm drains or on the street. We encourage you to attempt to eliminate your use of lead wheel weights by moving to adhesive non-lead wheel weights that do not pose a risk and are more likely to stay on the tires. They are easily dispensed and measured on a flexible adhesive tape roll, so you have the added benefit of not having various sizes sitting around your shop. A list of companies that supply both lead-free adhesive and clip-on wheel weights can be found on the Healthy Stuff website from Ann Arbor Michigan's Ecology Center.

In the meantime, use the following tips on handling any lead wheel weights that come into your office:

- > Place a container labeled "lead wheel weights only scrap metal" near the tire changing and wheel balancing machines.
- Keep the container securely covered and only uncover it when adding discarded wheel weights.
- > Recycle discarded lead wheel weights as scrap metal.
- Do not put lead wheel weights in the trash cans or dumpsters.
- > Return all lead wheel weights unused product to your supplier for credit or recycle them.
- Train all staff on the above requirements.

Oily rags, sorbent pads

Treat oily rags and sorbents as oily hazardous waste, unless they pass the "one drop" test (meaning they will not leak oil) as described in the MassDEP's "<u>Waste Management Guidance for Industrial Wipers and Sorptive Minerals Contaminated with Waste Oil</u>." For more information on waste oil management, see the "Waste Oil Management" fact sheet.

Sanding dusts

Dusts from sanding can contain the toxic materials from the cars' surfaces like the paint, metal, and even lead. Even though lead has been banned from household paint since 1978, it still exists in industrial and automotive paints. Assume that any vehicle that you are working on contains lead paint. Aside from lead, you must prove and keep records that the sanding dust contains levels of regulated toxics that are below the reporting threshold levels by having a <u>Toxicity Characteristic Leaching Procedure (TCLP)</u> done on your sanding waste. If the TCLP results are above the threshold for any of these, the spent material is considered hazardous waste and must be stored as such. If you do not perform the TCLP test, the spent material is still considered hazardous waste.

Solvent-based primers, basecoats, and clear coats

Solvents are usually ignitable and toxic, so your shop should manage them as hazardous waste. All clear coats contain isocyanates, which can cause work-related asthma and chemical sensitization when it is absorbed through the skin or inhaled. This article from Body Shop Business, "Your Lungs, Your Skin, Your Life" provides some context for isocyanates. The health damage is irreversible and can be fatal. In addition, if your shop uses primers or basecoats that contain xylene, toluene, benzene, or ethyl benzene among others, use extra care while handling and manage as hazardous waste. Use these tips to minimize paint waste from California's Department of Toxic Substances Control.

Solvents parts washing sink

The chemicals used in your parts washing sink can be toxic or ignitable and should be managed as hazardous waste. Solvent-based products can contain trichloroethylene (TCE), ethyl benzene, and xylene,

which are hazardous wastes, highly toxic, and associated with many negative health effects. Acetone and methanol are also listed hazardous wastes but less toxic than the first three listed. In addition, if your shop uses a product that contains hexane, it can have a synergistic effect with other chemicals to increase the hazardous nature of the product. The CA Department of Health Services' n-Hexane Use in Vehicle Repair Fact Sheet is a useful resource. Ask your supplier or product manufacturer for the Safety Data Sheet (SDS) to check the ingredients and consider moving toward a water-based or microbial parts washer to protect your workers and eliminate hazardous waste and associated costs. This Aqueous Parts Cleaning Fact Sheet from the CA Department of Toxic Substances Control provides additional information.

Solvent wipes

Any rags or wipes in your shop that are contaminated with solvent must be managed according to MassDEP's "Policy for Industrial Wipers Contaminated with Solvents."

Spray booth filters

Spray booth filters contain the chemicals listed in your paint and may be toxic. It is your responsibility to test your filters with a <u>Toxicity Characteristic Leaching Procedure (TCLP)</u> test to prove that your filters are not hazardous; otherwise, always treat and dispose of spent filters as hazardous waste.

Still bottoms from solvent recycling systems

The "pucks" of dried paint from your solvent recycling system can be toxic since they contain the remnants of paints and residual solvents. Unless you can prove otherwise through conducting a <u>TCLP</u> (see above, as mentioned in the Spray Booth Filter section), manage these as hazardous waste.

Used alkaline or acid cleaning solutions

Cleaning solutions with alkaline or acidic characteristics are usually corrosive and possibly may be toxic. If a waste has a pH of less than 2 or more than 12.5, it is a characteristic waste and should be managed carefully as hazardous waste.

Undeployed air bags

Some air bags contain corrosive and reactive substances (sodium azide) and should be managed as hazardous waste. Contact the air bag manufacturer to determine whether an each individual undeployed air bag contains hazardous material and dispose of them accordingly.

Used antifreeze

In Massachusetts, spent antifreeze is presumed to be non-hazardous when kept separate from and unadulterated by other wastes before recycling or disposal. However, the generator is ultimately responsible for making the determination whether or not the antifreeze should be labeled and dealt with as hazardous waste. Antifreeze cannot legally be disposed of in solid waste landfills, discharged to the ground or into catch basins that lead to surface water, or discharged to a sewer connection without a permit to do so. On-site or off-site recycling are the preferred methods of antifreeze "disposal." See the "Antifreeze Management and Recycling" fact sheet for more information.

Used fuel filters

Used fuel filters are both ignitable and toxic and should always be managed as hazardous waste.

Used oil

Used oil is a regulated substance (toxic and ignitable) in Massachusetts and it may be handled as hazardous waste oil or as "regulated recyclable materials" for use as fuel in a space heater under 310 CMR 30.200. For more information, see the "Hazardous Waste Management" and "Waste Oil Management" fact sheets in this guide. Also visit the MassDEP website for best management practices for waste-oil burners.

Used oil filters

When used oil filters are drained sufficiently and no longer leak oil, it is possible that these may be disposed of as municipal waste or sent to a metal recycler. Sufficient drainage consists of either being drained upside down over a drip rack or drain table for at least 12 hours or using an oil filter crusher to collect the waste oil. Otherwise, these filters must be managed as hazardous waste oil. See the "Oil Filter Can Crushers," "Hazardous Waste Management," and "Waste Oil Management" fact sheets in this guide.

Water-based paints

Even though water-based paints are generally much safer to use than solvent-based paints, they often contain toxic metals and materials that may be hazardous waste when discarded. Look at the SDS or ask your supplier if the product contains any metals that would indicate a need for a <u>Toxicity Characteristic</u> <u>Leaching Procedure (TCLP)</u>. Your waste hauler may also be able to determine the waste profile.

Other Hazardous or Otherwise Regulated Items

Aerosol cans

Aerosol cans can both contain hazardous substances and be hazardous themselves. Hazardous waste management companies will collect almost empty aerosol cans as they can be ignitable and possibly toxic.

Mercury-containing equipment (switches, fluorescent lights)

Mercury-Containing Equipment is classified as a "universal waste." It must be collected and contained in a tightly-sealed container and correctly labeled before being picked up by an appropriate management company. See the EPA's page on Mercury-Containing Equipment.

Scrap tires

MassDEP requires tires to either be stored in an enclosed area or trailer, or covered with a tarp if stored outdoors. Tires can be recycled and repurposed, so you can easily find places that will either remove the tires for free, or even have someone pay you for the scrap. It is always your shops responsibility to make sure that the tires and all wastes are properly stored and disposed of. <u>See MassDEP's requirements and recommendations for scrap tires</u>.

Refrigerant

Vehicle refrigerant is not a hazardous waste but is highly regulated by the EPA. If your shop does not recycle the refrigerant (see the "Refrigerant Recycling" fact sheet), it must be reclaimed by an EPA-certified reclaimer. For the list, see <u>EPA-Certified Refrigerant Reclaimers</u>.

For free and confidential technical assistance or questions, contact:

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