

What Should I Do With Used Oil Filters?

The Office of Compliance Fact Sheet Series

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What Are Used Oil Filters?

Oil filters are used in automobiles and trucks to remove solid contaminants from motor oil before oil is used to lubricate engine parts. Every time oil in an automobile or truck crankcase is changed, the oil filter must be replaced so that the solid contaminants from the old oil do not get into the new oil. According to the federal register, dated May 20, 1992, used oil filters are categorically excluded from the definition of a hazardous waste under RCRA, as long as the filters:

- Are not terne-plated.
- Have been properly drained of used oil.

What Are Terne Plated Filters?

Terne is a mixture of tin and lead. In the past, the disposal of terne plated oil filters in landfills has been a concern due to the potential lead contamination of the soil and/or groundwater. Lead is a hazardous waste, and disposing of a filter with lead plating is prohibited in most solid waste landfills. Within the past 3 to 5 years, most manufacturers have realized the difficulty of disposing of their filters and have changed the composition of the filter plating to contain insignificant or no amounts of lead. Shops should be aware of this concern when changing the filter on a vehicle that has not had a filter change in more than 3 to 5 years.

Proper Drainage of Used Oil

Used oil filters are required to be punctured and hot-drained. Puncturing can be with the claw of a hammer, with a screw driver, or any other similar object that will allow air to evacuate the remaining oil from the filter. Hot-draining generally means draining oil close to or at engine temperature. There are four distinct methods of hot-draining that can be used:

(1) **Gravity Draining**--When the filter is removed from the engine, it should be placed with its gasket side down in a drain pan. If the filter has an anti-drain valve, the "dome end" of the filter should be punctured with a screw driver (or similar device) so that the oil can flow freely. The filter should then be allowed to drain for 12-24 hours.

(2) **Crushed**--The filter is crushed by a mechanical, pneumatic, or hydraulic device to squeeze out the used oil and compact the remaining filter materials.

(3) **Disassembly**--The filter is separated into its different parts using a mechanical device. This allows most of the used oil to be removed from the filter, and the metal, rubber, and paper parts of the filter to be recycled separately.

(4) **Air Pressure**-- The filter is placed into a device where air pressure forces the used oil out of the filter.

Many state requirements governing used oil management are often more stringent than federal regulations. Contact your state authorities to find out if there are any additional regulations or recommendations relating to hot-draining of oil filters.

Fuel Filters (Other Than Oil)

Although not covered by the used oil requirements, used fuel filters not containing oil should be handled in the same manner as oil filters, except that the drained fuel should be separated. Used oil should not be mixed with any other fuel because most other fuels are hazardous wastes.

(Note: exceptions are sometimes made for diesel fuel and other fuels, but EPA generally does not recommend mixing used oil with other fuels.) If the fuel filters are not drained, the entire filter must be disposed of as a hazardous waste. See the hazardous waste fact sheet series for more details on handling waste fuels that are considered hazardous waste.

Recycling

Used oil filters have value because they can be burned for fuel and/or the metal components can be recycled. Many trade associations and state authorities have information on used oil filter recycling options in different areas of the country.

Disposal

If recycling is not a viable option, the used filters must be disposed of. Used oil and fuel filters that have been properly drained may be disposed of as nonhazardous solid waste in any municipal solid waste landfill. However, since some states do not allow the disposal of used oil filters in solid waste landfills, check with your state authorities.

Additional Information

Publications:

Environmental Regulations and Technology: Managing Used Motor Oil, EPA/625/R-94-010, December 1994

Managing Used Oil: Advice for Small Businesses, EPA530-F-96-004, November 1996

How Can I Transport Used Oil? Fact Sheet

What Are The Used Oil Mixing Requirements? Fact Sheet

How Should I Store Used Oil? Fact Sheet

Contacts: Additional information is also available from the following sources:

General information regarding the EPA - <http://www.epa.gov>

Used Oil Hotline (RCRA/Superfund/UST) at **1-800-424-9346**.

Filter Manufacturers' Council hotline at **1-800-99-FILTER** (for information regarding federal and state regulations and a listing of companies, by state, that transport, process, and recycle used filters).

