



PAINT BOOTH FILTERS

This fact sheet summarizes the requirements of hazardous waste regulations under the Resource Conservation and Recovery Act (RCRA).

RCRA requires businesses to perform a waste determination on all wastes generated to determine whether each is a hazardous waste. This can be done by laboratory analysis or by using “generator’s knowledge,” however, generator’s knowledge is accepted only when sufficient data is available to appropriately support such a conclusion. A written statement that identifies the waste as hazardous or non-hazardous and the data used should be kept whenever generator’s knowledge is used.

Paint booth filters act as an absorbent of paint overspray. Paint booth filters are often used to absorb waste solvent from the cleaning out of spray gun equipment. As such, the filters become contaminated with paint and/or spent solvents.

There are three ways paint booth filters can be hazardous when disposed. Spent paint booth filters can be ignitable, contain regulated concentrations of toxic heavy metals, and/or they may become contaminated with an F-listed spent solvent.

Spent filters that are still “wet” are potentially hazardous for the characteristic of ignitability (flash point < 140 °F). However, if filters are allowed to dry thoroughly prior to disposal, they are generally no longer ignitable.

Depending on the type of paints used, the spent filters have the potential to be hazardous for one or more toxic RCRA metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver). In order to properly determine whether waste filters are hazardous for these metals, **current** safety data sheets (SDSs) on all paints should be obtained. These SDSs can be readily obtained from a paint supplier or manufacturer. Determine which, if any, of the eight RCRA metals are listed as ingredients in each paint. Lead, barium, chromium, and cadmium are the most common. Be aware that the actual metal may be listed alone or as a part of another compound.

FOR EXAMPLE: ‘Lead chromate’ contains lead and chromium
‘Barium sulfate’ contains barium

Paint booth filters should be analyzed for any RCRA metal indicated on the SDS to determine if its levels are above the RCRA regulatory limit. If so, the spent filters are therefore characteristically hazardous for that metal. The rule requires that the waste sample be prepared using the Toxicity Characteristic Leaching Procedure (TCLP). Note that for

screening purposes, the sample may be analyzed without the TCLP preparation to determine the total levels of the metal. If any metals are detected in the ‘totals’ analysis, an additional TCLP test must then be performed to demonstrate the filters are nonhazardous. Note that the laboratory must be certified by the Department of Health National Environmental Laboratory Accreditation Program (NELAP). A list of these approved laboratories can be obtained from the Environmental Protection Commission of Hillsborough County (EPC).

If waste solvent is sprayed onto the paint booth filters, for example, when flushing a paint gun, the waste filters will likely be F-listed hazardous waste and cannot be discarded into the regular trash. Use SDSs to determine the ingredients of the solvents in use. If the solvent is determined to be F001, F002, F004, or F005 hazardous waste, anything it contaminates is also F-listed hazardous waste. A common example of a F005 solvent is lacquer thinner since it frequently contains toluene and methyl ethyl ketone. Do not spray solvent on the paint booth filters. Waste solvent must be collected in a storage container for eventual disposal as hazardous waste, and the container must be kept closed.

Be aware that a hazardous waste determination must be repeated whenever there is a change in products, process, or procedure that could potentially affect whether the filters will be hazardous or nonhazardous.

If the filters are determined to be nonhazardous, they can be disposed as a solid waste in the normal solid waste stream (i.e., dumpster), but the local solid waste department should be contacted for approval prior to disposal. Phone numbers are provided below. If the filters are determined to be hazardous, then a certified hazardous waste transporter should be used to ship the waste to an appropriate hazardous waste disposal facility. A list of hazardous waste transporters is available from the EPC.

Documentation of disposal must be kept on site for a minimum of three years. This includes any of the following: SDSs and laboratory analyses used in hazardous waste determinations, generator’s knowledge statements, uniform hazardous waste manifests or other disposal receipts from the disposal facility, as applicable.

Please contact EPC’s Small Quantity Generator Program if there are any questions about the information in this fact sheet. The phone number is provided below along with some others that may be helpful.

Local Hazardous Waste Programs
SQG Program of EPC: 813-627-2600
FL Dept of Environmental Protection: 813-470-5700
Hillsborough County HHW Program*: 813-272-5680
*RESIDENTIAL ONLY - Option 1

Local Solid Waste Departments
Hillsborough County: 813-272-5680
City of Tampa: 813-348-1146
Plant City: 813-757-9208
City of Temple Terrace: 813-506-6570

E-Mail: epcinfo@epchc.org