

AEROSOL CAN DISPOSAL FOR BUSINESSES



SOLID WASTE SECTION



Generators of waste aerosol cans are responsible for determining if their wastes are hazardous. All contents of the can (product, inert ingredients, propellants, and gases) may or may not be identified on the label and Material Safety Data Sheet (MSDS). Aerosol cans that are used for residential purposes are excluded from the definition of hazardous waste (40 CFR 261.4(b)(1)). If an aerosol can is destined to be disposed of, the generator must make a hazardous waste determination on the can and its contents.

DISPOSE OR RECYCLING

A business has options when disposing of an aerosol can. They can manage it as a solid waste, hazardous waste or recycle it.

- If the can is empty and non-reactive, it can be managed as a non-hazardous solid waste.
- According to EPA's current regulatory interpretation, a steel aerosol can that does not contain a "significant" amount of liquid would meet the definition of "scrap metal" in 40 CFR 261.1(c)(6). If the aerosol can is essentially empty (no significant amount of liquid) **and** is being **recycled for scrap metal**, it would fall under the scrap metal exclusion of 40 CFR 261.6(a)(3)(ii), which excludes recycled scrap metal from the Resource Conservation and Recovery Act (RCRA) regulation.
- It can also be managed as a hazardous waste if the can still contains a listed waste or is characteristically hazardous under 40 CFR 261.

EMPTY CONTAINER

While the aerosol container might have all its contents removed using practices commonly employed to remove materials from that type of container, the waste generator must also demonstrate that it has less than 3% by weight or no more than one inch of residue in the can, in order for it to be considered "RCRA empty" (40 CFR 261.7(b)(1)(i) & (iii)). A 16-ounce aerosol can should contain no more than 0.48 ounces of residual hazardous waste in order to be considered "RCRA empty". A simple *shake* test may be sufficient.

If the empty container held a P-listed hazardous waste, the can would be P-listed until it was rendered empty by triple rinsing the contents. Often it is cheaper and easier to dispose of the can as a P-listed waste instead of rinsing it.

In summary, an empty can that does not contain a listed waste can be recycled as non-hazardous solid waste. A recycler may require the cans to be punctured for safety precautions.

CANS WITH PRODUCT IN THEM/BROKEN NOZZLES

If you must dispose of aerosol cans that still have product in them, you will need to determine if the contents remaining in the can are hazardous waste before you decide how to dispose of the can. The contents of the can will be hazardous waste if the material exhibits a characteristic of hazardous waste (such as ignitibility) or if it is a listed waste. Most aerosol cans have warnings that the contents are under pressure and to not puncture the can in an uncontrolled manner or it can explode. These warnings alone do not mean that the aerosol can is considered to be a hazardous waste. That determination can also be based on the contents remaining in the can. The contents remaining in an aerosol can, would not be considered spent and therefore would not carry the hazardous waste F-codes for spent solvents. An aerosol can may, however, carry a P- or U-code for unused chemical products.



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CAN PUNCTURING

When a can is punctured either to make the can non-reactive or to empty the can of its contents, the can is typically pressurized with either a flammable gas such as propane or isobutene, or a nonflammable gas such as carbon dioxide. This propellant is typically captured in a filter when using commercially available puncturing equipment. A hazardous waste determination must also be made on the filters. Such a determination can be cumbersome and some generators avoid the expense of testing by simply managing the filters as hazardous waste anyway. Emptying pressurized aerosol cans can be dangerous. Generators should make sure the contents of different cans that are emptied into the same receptacle are compatible with one another. Anyone puncturing cans that are pressurized should use safety precautions as well as personal protective equipment.

At this time, EPA Region 7 does not consider the puncturing of aerosol cans as hazardous waste treatment.

TIPS

- New cans with defective nozzles should be returned to the point of purchase.
- Purchase only the quantity that is needed for the job purpose.

STORAGE

Waste aerosols whose contents (including propellants) are non-hazardous have no hazardous waste storage requirements. Follow fire protection requirements for product storage.



Store hazardous waste aerosols in a closed container marked with:

- The words *Hazardous Waste*,
- A clear description of the waste, and
- The accumulation start date (the date you first places waste in the container).

Non-empty examples

Three examples of cans that do not constitute an “empty” aerosol can:

- An aerosol can that has lost its spray cap before use. *This material is intended for guidance purposes only. It is not meant to be used.*
- An aerosol can that fails to spray before the contents are used up.
- An aerosol can that the user just doesn’t want anymore before the contents are used up.

COMMON HAZARDOUS WASTES THAT MAY BE PRESENT IN SPENT AEROSOL CANS

CLASSIFICATION	DESCRIPTION	EXAMPLES	WASTE CODES
Corrosive (Acids/Bases)	pH<2 OR pH>12.5	Toilet bowl and drain cleaner, water treatment Chemicals, Rust removers, etc.	D002
Ignitable	Flashpoint < 140 F	Non-empty aerosol cans, Solvents, etc.	D001
Reactive	cyanides, reacts violently with air or water	Some nitrogen compounds, including some fertilizers, unstable chemicals, etc.	D003
Toxic	Test “representative” sample to determine if waste will leach any compounds above the threshold limits listed in 40 CFR 261.24	Chromium-based corrosion inhibitor, pesticides containing arsenic, 2,4-D etc.	D004-D043
Waste Solvents	see regulation for specific solvents and solvent mixtures	Xylem, acetone, alcohol’s used as solvents, automotive parts cleaners, etc.	F001-F006
Waste Chemicals	Listed outdated or unneeded products for which the listed chemical is the SOLE active ingredient.	Some outdated photographic products, some excess lab chemicals, unused pesticides, etc.	U001-U409
Acutely Hazardous waste chemicals	Listed outdated or unneeded products for which the listed chemical is the SOLE active ingredient.	Unused poisons (cyanides, arsenic, etc.), unused pesticides (larding, nicotine etc.) toxins, etc.	P001-P205