
Requesting TCLP Analysis on Waste Antifreeze

Iowa Waste Reduction Center / University of Northern Iowa

319-273-8905

September 2015

Every business is responsible for determining if its wastes are hazardous or nonhazardous. Waste antifreeze may be hazardous from toxicity due to the presence of toxins at or above EPA regulatory thresholds. Submitting a representative sample of waste antifreeze to a laboratory is the only accurate and defensible way to determine if waste antifreeze is hazardous or non-hazardous from toxicity.

To make an accurate hazardous/non-hazardous waste determination, a representative waste antifreeze sample should be collected and tested for the following heavy metals and VOCs using TCLP laboratory methodology. In addition, the laboratory should also be instructed to perform arsenic and selenium analyses using the GRAPHITE FURNACE procedure.

TCLP PARAMETER	REGULATORY LIMIT (MAXIMUM)	EPA HAZARDOUS WASTE NUMBER
Metals		
Arsenic	5.0 mg/L	D004
Barium	100.0 mg/L	D005
Cadmium	1.0 mg/L	D006
Chromium	5.0 mg/L	D007
Lead	5.0 mg/L	D008
Mercury	0.2 mg/L	D009
Selenium	1.0 mg/L	D010
Silver	5.0 mg/L	D011
Volatile Organic Compounds (VOCs)		
Benzene	0.5 mg/L	D018
Carbon Tetrachloride	0.5 mg/L	D019
Chlorobenzene	100.0 mg/L	D021
Chloroform	6.0 mg/L	D022
1,2-Dichloroethane	0.5 mg/L	D028
1,1-Dichloroethylene	0.7 mg/L	D029
Methyl Ethyl Ketone (MEK)	200.0 mg/L	D035
Tetrachloroethylene	0.7 mg/L	D039
Trichloroethylene	0.5 mg/L	D040
Vinyl Chloride	0.2 mg/L	D043

Waste antifreeze is hazardous from toxicity if any of the above TCLP parameters are found at a concentration equal to or greater than its corresponding regulatory limit. Hazardous waste antifreeze must be managed in accordance with hazardous waste management regulations and disposed through an EPA-permitted hazardous waste management company. Nonhazardous antifreeze may be managed through any reputable waste management company. The Iowa Waste Reduction Center (319-273-8905) can assist you with interpreting TCLP test results and determining proper waste management practices.