## **Calculating Emissions**



### from Your Petroleum-Base Dry Cleaner

### **Formula for Calculating Your Emissions:**

Amount of solvent used (gallons/month and gallons/yr) x VOC content of the solvent (% by Wt. or lbs/gallon)= VOM emissions

gallons/year x lbs/gallon = lbs/year of emissions\*

Tons/year of Emissions = Ibs/year of emissions ÷ 2000 lbs

\*this assumes 100% VOM emitted into Air, if not 100 % you would need subtract amount of used solvent shipped out to the recycler or for disposal multiplied by the VOM content for the used solvent.to get the actual VOM emissions

#### DF 2000 Example:

1000 gal/yr x 6.401 lbs/gal = 6401 lbs/year

6401 lbs/year ÷ 2000 lbs = 3.2 tons/year VOM Emissions

### How to Find Important Information for Calculating Your Emissions

#### Annual Solvent Usage

To calculate your emissions, you will need to know how many gallons of solvent you used in the past twelve months. Solvent Usage would include the following:

Solvent Available Month 1

- + Solvent Purchases Month 1-12
- Spent Solvent sent to a recycler/
- waste hauler
- Solvent on hand Month 12
- = Annual Solvent Usage

#### How to Find the lbs/gallon if your MSDS/SDS does not provide it.

If your MSDS/SDS does not provide the VOC lbs/gal of the solvent or lbs/gal, you would need the density and if not available the specific gravity or relative density that is listed in the products MSDS/SDS Sheet and multiply it by the weight of water (8.34 lbs/gallon) to find the products lbs/gallon.

**Formula:** (Weight of Water = 8.34 lbs)

Density or Specific Gravity or Relative Density x weight of water = lbs/gal

#### From MSDS or SDS Sheets:

Product	Density-Specific Gravity/Relative Density	VOC lbs/gallon	Calculated lbs/gal
DF-2000		6.401 lbs/gal	
EcoSolv/EcoGreen	.76		6.34 lbs/gal
Gen X	<u>.83</u>		6.92 lbs/gal

#### EcoSolv/EcoGreen

Gen X .83 x 8.34 lbs/gal= 6.92 lbs/gal

.76 x 8.34 lbs/gal = 6.34 lbs/gal

#### DF 2000

This publication is intended as general guidance only and is not a substitute for applicable rules. The owner/operator of an emission source should read the rules to determine all applicable requirements. Sept 2019

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6.401 lbs/gal (provided)