

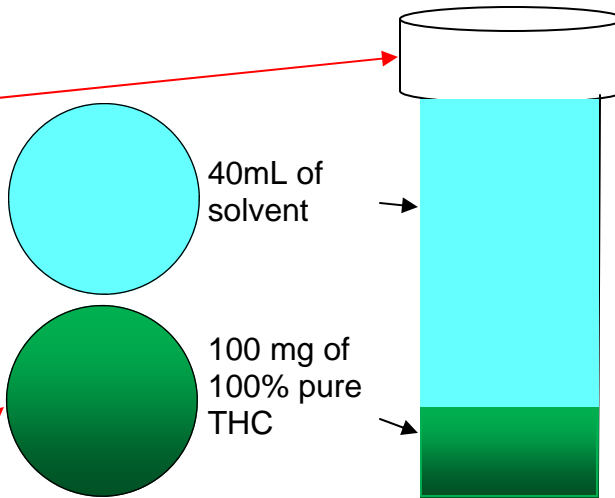
Cannabinoid Calibration Math

February 2015

SRI's standard procedure for making a sample is to put 100 mg of sample into 40 mL of solvent.

1 uL of sample, as well as the calibration standard, will be injected into the GC.

To make the math easier, the 100 mg of sample will hypothetically be 100% pure THC.



100 mg

 40 mL
 ↓
 100,000 ug

 40,000 uL
 ↓
 100,000,000 ng

 40,000 uL
 ↓
 100,000 ng

 40 uL

Restek's Cannabinoids Standard (catalog # 34014) is at a concentration of 1000 ug/mL for each of the three cannabinoids (CBD, d9-THC, and CBN). 1 uL of a 1000 ug/mL standard = 1000 ng/uL.

$$\frac{2,500 \text{ ng}}{\text{uL}} = 100\% \text{ pure THC}$$

$$\frac{1,250 \text{ ng}}{\text{uL}} = 50\% \text{ pure THC}$$

$$\frac{1,000 \text{ ng}}{\text{uL}} = 40\% \text{ pure THC}$$

$$\frac{250 \text{ ng}}{\text{uL}} = 10\% \text{ pure THC}$$

$$\frac{2,500 \text{ ng}}{\text{uL}} = 100\% \text{ pure THC}$$

If the sample has 100 mg of 100% pure THC, each uL will have 2,500 ng of THC.