

5-8-64

SNM-8

70-36

Mallinckrodt Chemical Works

Plan to Mfg. for Allis Chalmers several thousand
fuel pins cont. UO_2 of this density. Pins 18" long x $7/16$ " dia.
Each pin 255 g. UO_2 , 1.8" diam Will ship 170 pins
^{7 gals, 10 3/4" ID x 20 1/2" height} in w.t. drum, packed in polystyrene foam, in outer 55 gal drum
^{24 55 x 38 3/8" C.H.T.}
braced with steel angle iron Tee 1" x 1" x 3/16"

$$170 \times \overset{\text{Pin}}{255} \times .8815 = \overset{38,200}{32,216} \text{ g. } U \times .018 = \overset{X .015}{687.89 \text{ g } U-235}$$

40000

Sq. ft. Vol 7.95 cu ft

Shipping drum is about 50 gal drum = $\frac{650}{7.95} = 87 \text{ g/gal}$
was made for 1000 g/gal by T.M.T., T.I.D. 2000
110' 112' 115'

By K-1017, done 5/8/64
1.8" diam pins 1.8" diam pins 1.8" diam pins 1.8" diam pins 1.8" diam pins
in 130 gal drum

7.35 cu ft
Says 7 gal in 130 gal drum 2 kg Safe drum
 $\frac{2000 \text{ g}}{7.35} = 270 \text{ g/cu ft (material)}$

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