

ABSORBER SET – for radiation

Cat: AP0030-001 (set 24 absorbers)

GENERAL DESCRIPTION:

A set of 24 different plates used to study the absorption of radioactive particles. The plates range from Tissue Paper and very thin foils for Alpha particle absorption to thicker aluminium foils and plates for Beta particle absorption to lead plates for Gamma particle absorption.

Each absorber has an active area of 60x60mm and the complete set is housed in a strong cardboard container with a plastic insert for the storing of each absorber.

In addition to absorbers, the set contains 3x plastic plates used for supporting the thick lead plates in Castles where the lead plates are too thick to fit the grooves in the Castle sides.

The set includes also a strong spring loaded plunger and base as a holder for both the radioactive source and the absorber so that these items are always in the same relative positions for reproducible experiments.

AP0030-001



Physical size: 240x200x85mm LxWxH Weight: 3.3kg

Kit contains holder for absorbers and for radioactive sources behind the absorber.

Designed and manufactured in Australia by Industrial Equipment and Control Pty Ltd

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Scientrific Pty Ltd

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The specifications for each absorber are:

THICK	DENSITY	#	THICK	DENSITY	#	THICK	DENSITY	#
Tissue Paper			Aluminium sheet			Lead plate		
	1.82 mg/cm ²	1	0.48 mm	130 mg/cm ²	9	1.73 mm	1.95 g/cm ²	18
Aluminium foil			0.60 mm	161 mg/cm ²	10	3.04 mm	3.43 g/cm ²	19
0.015mm	3.20 mg/cm ²	2	0.76 mm	208 mg/cm ²	11	4.41 mm	4.94 g/cm ²	20
0.022mm	4.30 mg/cm ²	3	0.93 mm	250 mg/cm ²	12	6.20 mm	7.02 g/cm ²	21
0.050mm	13.8 mg/cm ²	4	1.18 mm	375 mg/cm ²	13	7.75 mm	8.73 g/cm ²	22
0.10 mm	27.0 mg/cm ²	5	1.58 mm	423 mg/cm ²	14	9.36 mm	10.58g/cm ²	23
0.15 mm	38.4 mg/cm ²	6	1.97 mm	528 mg/cm ²	15	12.21mm	13.16g/cm ²	24
0.25 mm	68.3 mg/cm ²	7	2.45 mm	656 mg/cm ²	16	Including 3 plastic plates with different orifices to support lead plates in castles.		
0.31 mm	77.7 mg/cm ²	8	2.91 mm	783 mg/cm ²	17			



IEC manufactures a range of high quality, low cost Geiger Counters suitable for both the Laboratory and in the field.

Parts & accessories:

AP1885-001 Geiger tube holder, to align GM tube with absorber holder.

Radioactive sources suitable for school use are:

PA2667-001 (Polonium 210 Alpha source)

PA2667-010 (Strontium 90 Beta source)

PA2667-020 (Cobalt 60 Gamma source)

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