

How much adhesive will I need?



We have added a new **Technical Bulletin** to our [Technical Resources](#) to help answer the commonly asked question: ***"How much adhesive will I need?"***.

The Technical Bulletin is a guide to calculating approximate amounts of material required, based on the bondline dimensions. ***"How much adhesive will I need?"*** also includes a link to download our **Adhesive Usage Calculator tool** where you can calculate the approximate volume or weight of material needed.

Another common query after calculating how much adhesive required is ***How much adhesive will I get from various package sizes*** that a material can be supplied in. The Technical Bulletin also addresses this query.

You can download it here:

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TECHNICAL BULLETIN



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Calculating Volume of Adhesive Required

To calculate approximately how much material is required, try using the following calculation:

$$\text{Bondline thickness (mm)} \times \text{Total surface area of bondline (m}^2\text{)} \\ = \text{Volume of adhesive required (L)}$$

Bondline thickness can range from 0.05mm for a very thin adhesive, right up to 0.40mm for a thick material, or more where there is gap filling required. If in doubt, use 0.20mm, which will be a safe compromise for many applications.

As a rough guide, this table shows approximately how much area can be covered by 1 litre of material, depending on the size of the bondline:

Bondline thickness (mm)	Theoretical surface area covered by 1L of material (m ²)
0.05	20
0.15	7
0.20	5
0.25	4
0.40	2.5

Calculate Now!

Try using our
Adhesive Usage
Calculator for an
easy way to
calculate volume
and weight of
adhesive required.

Calculating Weight of Adhesive Required

Once the volume has been calculated, the equivalent weight can be calculated in this way:

$$\text{Volume of adhesive (L)} \times \text{Specific gravity of adhesive (SG)} = \text{Weight of adhesive required (kg)}$$

Specific gravity can be found on the material's data sheet; it is a measure of density. If the SG cannot be found on the data sheet, use 1.0 for very thin, clear or watery adhesives, and 1.5 for very thick, heavily filled, viscous adhesives. If in complete doubt, use 1.1.

Theoretical Yields of Various Package Sizes

The tables below shows approximately how much each pack volume could yield in bead length or number of dots depending on the bead diameter.

		Linear yield by package size					
		30ml	50ml	200ml	310ml	400ml	1L
Bead diameter	1mm	38m	64m	255m	395m	509m	1273m
	2mm	9.5m	16m	64m	99m	127m	318m
	3mm	4.2m	7.1m	28m	44m	57m	141m
	4mm	2.4m	4.0m	16m	25m	32m	80m
	5mm	1.5m	2.5m	10m	16m	20m	51m
	6mm	1.1m	1.8m	7m	11m	14m	35m

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