

SiSiB® PSA508 SILICONE PSA

INTRODUCTION

SiSiB® PSA508 is a solution of polydimethylsiloxane adhesive and resin diluted in toluene, functioning as a high-performance silicone pressure-sensitive adhesive (PSA). It offers excellent adhesion and peel strength, along with robust temperature endurance, moderate viscosity, and strong resistance to moisture and aging.

It cures via thermal activation at 150-170°C via solvent evaporation and polysiloxane crosslinking, forming a strong, permanent bond with PET surface.

CHARACTERISTICS

- >1000 gf/in peel strength to PET substrates.
- Good peel force stability (5%) after thermal/UV aging tests.
- No adhesive transfer or residue on PET surfaces.

PHYSICAL PROPERTIES

Appearance	Transparent liquid
Viscosity 25°C	30000-100000 cP
Solid content	58-62 %
Solubility	Soluble in ethyl acetate and xylene

GUIDE MIXING RATIO

PSA508:	1000 g
Solvent (Ethyl Acetate)	1000 g
Curing Agent	20-25 g
Curing conditions	170°C, 90-120 Second

Curing Agent: Di(2,4-dichlorobenzoyl) peroxide

APPLICATIONS

- Electronics: Insulation films, flexible circuit board masking.
- Industrial: Heat-resistant masking in powder coating or PCB assembly.
- Automotive: Engine component protection during thermal treatments.

Compatibility: Optimized for PET roll applications-verify compatibility with alternative substrates (e.g., PI, PTFE) before scaling up production.

USAGE GUIDELINES

Preparation:

Mixing: Dilute PSA508 sequentially with ethyl acetate and curing agent.

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Ensure the silicone PSA is homogeneously mixed.

Filtering: Filter through ≥ 400 -mesh screen before coating.

Coating & Drying:

Tunnel Dryers Temperature Profile: Load the coated substrate into a pre-heated curing oven. Maintain a thermal activation range of 150-170°C to initiate solvent evaporation and polysiloxane crosslinking.

Notes:

Use the prepared adhesive within 8 hours to prevent viscosity degradation. Avoid exposure to water, impurities, or substances containing amine or sulfur, which may inhibit curing.

Ensure that all processing equipment is thoroughly cleaned and free of any solvent residues prior to use.

PACKING

SiSiB[®] PSA508 is supplied in 20Kg plastic drum or 180Kg steel drum.

HANDLING

This document does not contain the product safety information required for safe use. Before handling, please refer to the product and safety data sheets, as well as container labels, for information on safe usage, physical hazards, and health risks. Safety Data Sheet is available on the website, from the distributor, or by contacting SiSiB customer service.

STORAGE

In the original unopened packaging, SiSiB[®] PSA508 has a shelf life of 6 months in a dry and cool place.

NOTE

All information in the leaflet is based on our present knowledge and experience. We reserve the right to make any changes according to technological progress or further developments. Performance of the product described herein should be verified by testing.

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