

SunSeal - DuploTEC 12410/20 SBF® secure bonding solution for Chip Implanting:

At Sun Chemical and Lohmann, we understand the importance of reducing environmental impact, and that's why we especially developed our products to be used with alternative card materials such as Parley Ocean Plastic®, PLA, R-PVC etc.

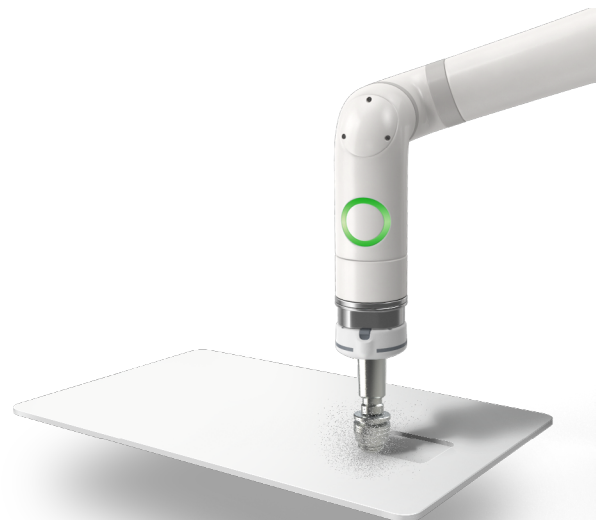
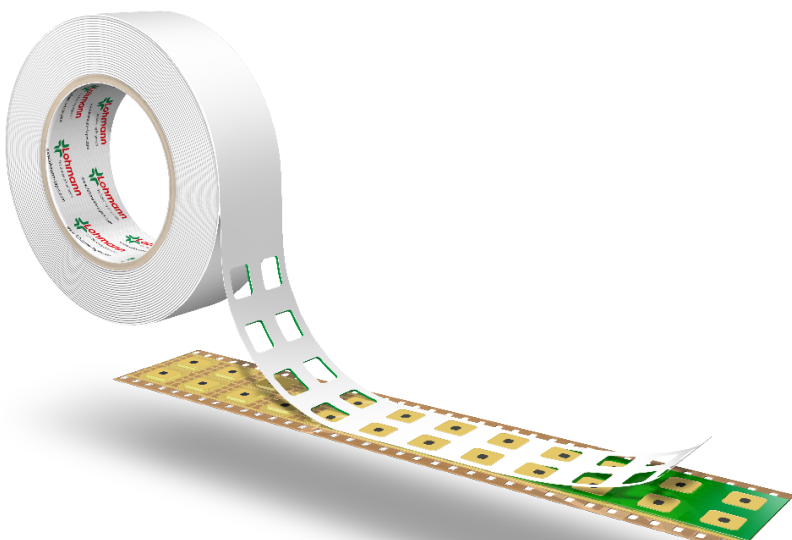
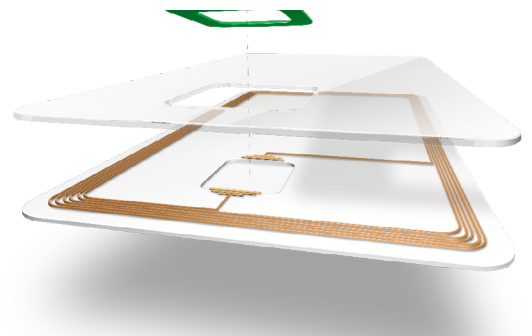
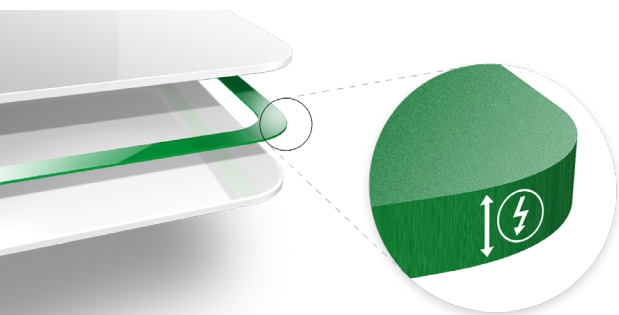
To safeguard sensitive information incorporated in smart cards against counterfeiting, tampering and unauthorized access. Sun Chemical and Lohmann offer state-of-the-art high-tech adhesives and adhesive tapes. These reliable and tamper-proof thermoset bonding solutions help to combat counterfeiting and increase efficiency during the lamination process while realizing new security features.

These solutions enable our clients to achieve their objectives while optimizing resource usage, creating leaner manufacturing processes, increasing energy efficiency and reducing cycle times. "Doing more while using less" is a key driver for success.

Benefits for card manufacturers:

- Create secure and reliable connections between chip modules and antennas
- Remain competitive by reducing energy costs and increasing output
- Reduce the environmental footprint by using Lohmann's solvent-free adhesive products that are activated at low temperatures and offer a very good performance on halogen-free materials (such as Parley Ocean Plastic®, rPETG and PLA) or rPVC

Products are solvent-free thermoset transfer film that is easy to use and can be electrically conductive in the z-direction. This film can be used on in-use equipment, making it an efficient and cost-effective solution for any card manufacturer. It comes with a high flexibility after curing and does not embrittle. With DuploTEC® SBF, card manufacturers can reduce their environmental footprint while still creating high-quality smart cards.



SunChemical®

a member of the DIC group



Product name		DuploTEC® 12410 SBF	DuploTEC® 12420 SBF EC
Substrates to bond		Dual interface / smartcard and fingerprint sensor modules	
		Card substrates (e.g. Parley Ocean Plastic®, rPET, rPETG, PLA, rPVC, PC, PVC)	
Standard width [mm] / length [m]		29 mm x 200 m	
Thickness [µm]		40	65
Type of adhesive		Latent reactive polyurethane	
		Non-conductive	Conductive Silver-plated aluminium particles
Electrical resistance [mΩ / mm²]		—	≤ 200 mΩ / 0,25 mm² ≤ 100 mΩ / 1,00 mm²
Prelamination conditions	Temperature [°C]	50 — 60	50 — 60
	Time [sec]	1.5 — 5	1.5 — 5
	Pressure [N / cm²]	15 — 50	15 — 50
Main implanting conditions	Temperature [°C]	120 — 180	120 — 180
	Time [sec]	0.6 — 5	0.6 — 5
	Pressure [N / cm²]	50 — 150	50 — 150
Storage conditions		Below +35°C at humidity level of 50 — 70 % r. h.	
Shelf life		12 months after production when kept within the specified temperature conditions.	
The process parameters are dependent on the used card materials / chip modules as well as on the processing machine.			

Interested in finding out more on bonding solutions for smart cards & security applications?

Contact Sun Chemical:

- Website: www.ctlay.com
- Email: sales@ctlay.com

Contact Lohmann:

- Website: www.lohmann-tapes.com
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