

SilForce™ SLP Series

Sustainable,
New Patent Pending,
Fast Cure & Anchorage,
Thermal Solventless Technology



MOMENTIVE®
SOLUTIONS FOR A SUSTAINABLE WORLD™

INDEX

SilForce SLP Series..... 3

Ultra-Low Platinum

Key Features and Benefits..... 4

Sustainable solutions..... 5

Low Temperature Cure (LTC) Coating

Key Features and Benefits..... 6

Sustainable solutions..... 7



SilForce SLP Series

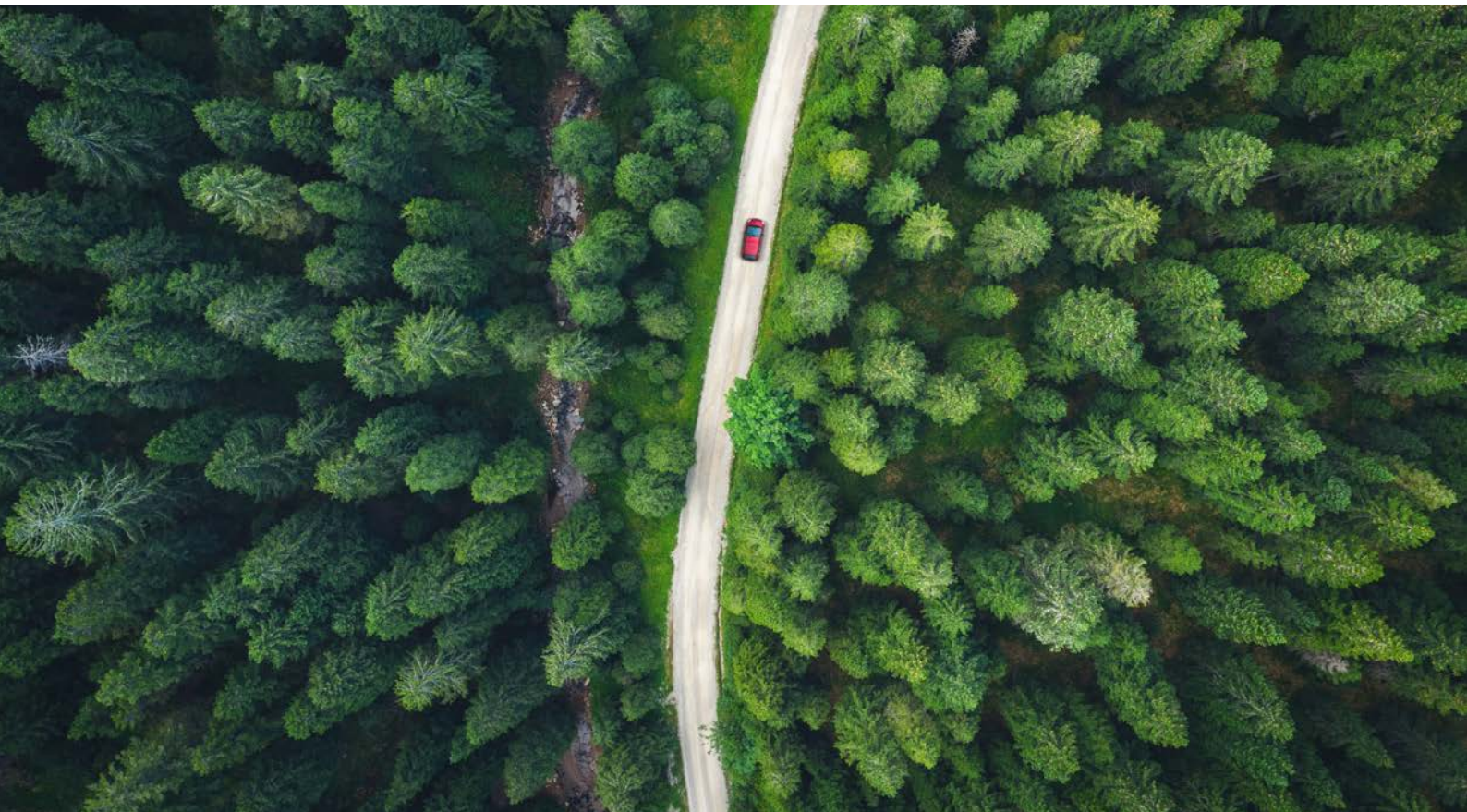
Momentive's SilForce SLP series is a game-changing, patent-pending thermal solventless release coating enabling more sustainable production of liners for the tapes and labels industry. It consists of the typical base polymer, crosslinker, and catalyst; all based on thermal Pt-cure chemistry.

Sustainability is enabled by Ultra-Low Pt catalyzed coatings.

- With our new SLP polymer technology, we have been able to show comparable cure, process, and release performance at Pt levels in the 10-20 ppm range, with no degradation in anchorage on commercially available paper substrates.

Sustainability enabled by Low Temperature Cure (LTC)

- This new technology has proven to cure at a temperature around or even below 100°C on paper substrates, at standard platinum catalyst levels (not Low Pt).



Ultra-Low Platinum

Key Features and Benefits

- Ultra-Low Platinum levels in the range of 10-20 ppm provide future cost saving.
- Comparable formulation means similar release performance against PSA's.
- Robust process running on existing equipment.
- Fast curing technology at ultra-low levels of catalyst on paper liners.
- Improved anchorage and similar release force.
- A reduced platinum system makes the label producer independent of the price volatility of this precious metal.



Sustainable solution

Ultra-Low Platinum levels

Sustainable solution

The new SLP series enables cure with less Pt resulting in 35-50% savings in catalyst on paper liners like Glassine.

The products contribute substantially to a more sustainable world by consuming less of this precious metal.

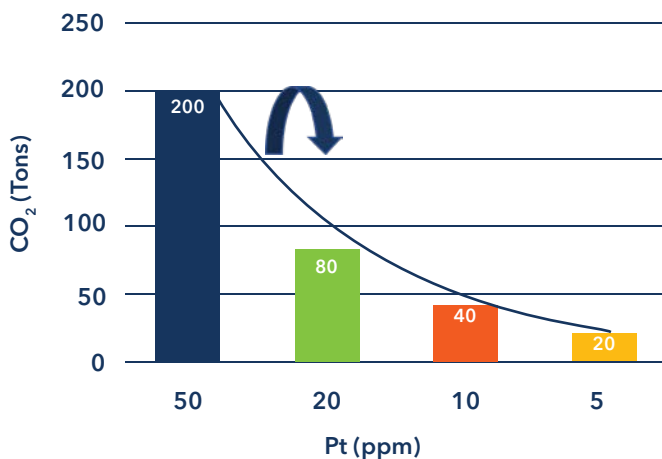
More sustainable process :

- Less mining
- Less energy & water for extraction
- Less carbon dioxide emission

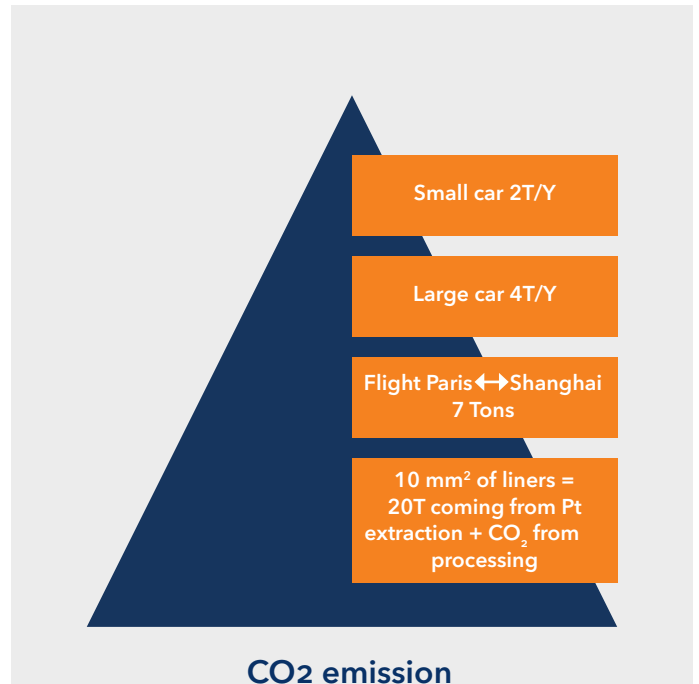
Extraction of 1 kg of pure platinum metal emits 40 Tons of CO₂ similar to the emission of 10 cars/year.

Reference:
April 2010 Minerals Engineering 23(5):438-450;
DOI: 10.1016/j.mineng2009.12.007
Authors:
Bonnie Glaister(Monash University, Australia); Gavin Mudd (RMIT University)

CO₂ Emission for 100 million m²*



*CO₂ reduction coming from the catalyst dropped.
Not considering the emissions related to the processing.



Low Temperature Cure (LTC) Coating

Key Features and Benefits

- Get cure at exit web temperature around 100°C.
- Comparable formulation means similar release performance against PSA's.
- Robust process running on existing equipment.
- Combined fast cure and anchorage technology enable 30°C-50°C lower temperature curing at typical Pt levels.



Sustainable solution

Sustainable solution

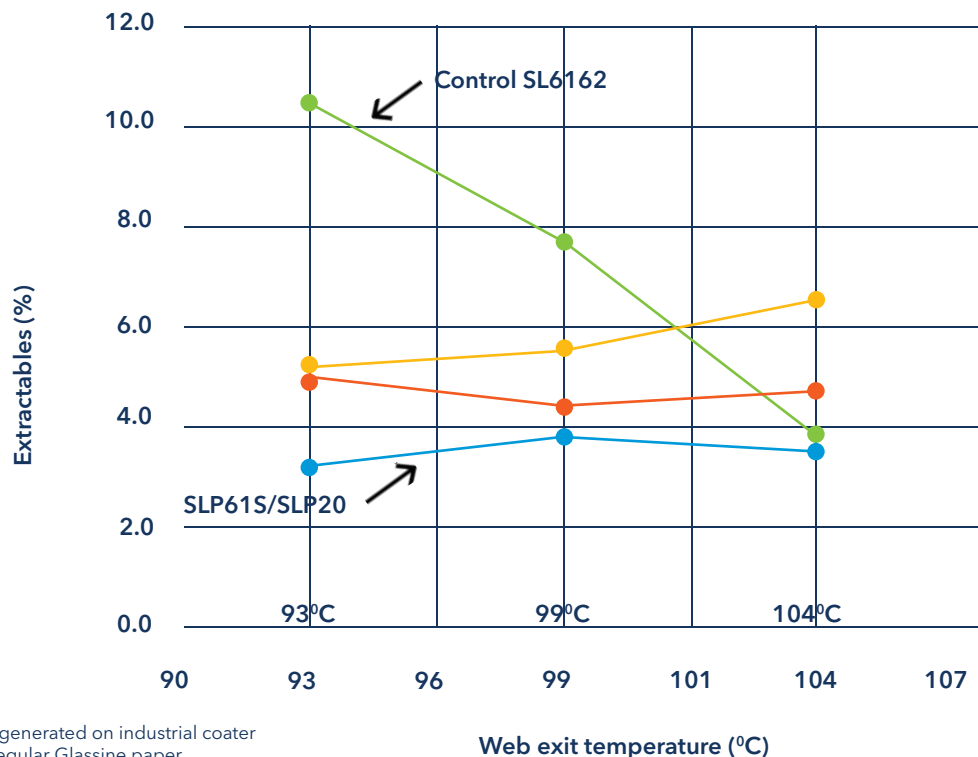
The new SLP series at typical Pt levels of 50-80 ppm enable cure at temperatures 30°C-50°C less than normal on paper liners like Glassine.

Sustainability via less fossil fuel consumption and lower carbon dioxide emissions.

More sustainable process:

- Less heat
- Less gas / electricity
- Less water and waste water
- Less remoisturization
- Less cooling

Machine trials with SLP series at low temperature on Glassine papers at 80 ppm



*Release liners generated on industrial coater at 1.0 gsm on regular Glassine paper.

Test data. Actual results may vary.

Momentive's new patent-pending, fast cure technology enables sustainability, future platinum protection, and potential for process and formulation flexibility. We look forward to showing you how our new SilForce SLP Series can begin working for you on your next project.

Contact us today for more information!



Momentive Performance Materials, Inc
260 Hudson River Road
Waterford, NY 12188
USA

www.momentive.com

CUSTOMER SERVICE CENTERS

EMAIL: commercial.services@momentive.com

AMERICAS

USA & CANADA

800 295 2392 (Toll Free)
+1 704 805 6946

MEXICO

+52 55 2169 7670

BRAZIL

+55 11 4534 9650

EMEIA

EUROPE

+39 05 1092 4300

MIDDLE EAST, INDIA & AFRICA*

+91 44 7121 2207

* All Middle Eastern Countries, Africa, India, Pakistan, Sri Lanka, Bangladesh

ASIA PACIFIC

CHINA

800 820 0202 (Toll Free)
+86 21 3860 4892

JAPAN

+81 3 5544 3111

KOREA

+82 2 6201 4600

SOUTH EAST ASIA, AUSTRALIA & NEW ZEALAND*

+60 3 9206 1543

* All South East Asia Countries (Malaysia, Singapore, Thailand, Indonesia, Vietnam, Philippines, Cambodia, Myanmar) and other countries located in the Pacific region.

DISCLAIMER: THE MATERIALS, PRODUCTS AND SERVICES OF Momentive Performance Materials Inc. and its subsidiaries and affiliates DOING BUSINESS IN LOCAL JURISDICTIONS (collectively "SUPPLIERS") ARE SOLD BY THE RESPECTIVE LEGAL ENTITY OF THE SUPPLIER SUBJECT TO SUPPLIERS' STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN THE APPLICABLE DISTRIBUTOR OR OTHER SALES AGREEMENT, PRINTED ON THE BACK OF ORDER ACKNOWLEDGMENTS AND INVOICES, AND AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION, RECOMMENDATIONS, OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SUPPLIERS MAKE NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING SUPPLIERS' PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. AFOREMENTIONED EXCLUSIONS OR LIMITATION OF LIABILITY ARE NOT APPLICABLE TO THE EXTENT THAT THE END-USE CONDITIONS AND/OR INCORPORATION CONDITIONS CORRESPOND TO THE RECOMMENDED CONDITIONS OF USE AND/OR OF INCORPORATION AS DESCRIBED BY SUPPLIER IN ITS PRODUCT DATA SHEET AND/OR PRODUCT SPECIFICATIONS. EXCEPT AS PROVIDED IN SUPPLIERS' STANDARD CONDITIONS OF SALE, SUPPLIERS AND THEIR REPRESENTATIVES SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS OR SERVICES DESCRIBED HEREIN. Each user bears full responsibility for making its own determination as to the suitability of Suppliers' materials, services, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating Suppliers' products, materials, or services will be safe and suitable for use under end-use conditions. Nothing in this or any other document, nor any oral recommendation or advice, shall be deemed to alter, vary, supersede, or waive any provision of Suppliers' Standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Suppliers. No statement contained herein concerning a possible or suggested use of any material, product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Suppliers or any of its subsidiaries or affiliates covering such use or design, or as a recommendation for the use of such material, product, service or design in the infringement of any patent or other intellectual property right.



Momentive is a registered trademark of Momentive Performance Materials Inc.
The use of the "TM" symbol designates registered or unregistered trademarks of Momentive Performance Materials Inc. or its affiliated companies.

Copyright 2022 Momentive Performance Materials Inc. All rights reserved.