



---

## PRODUCT INFORMATION

---

# Extreme PSO SF

C2C-MHC PLATIN Status

The Extreme PSO SF series is designed as a modern, intensive universal series for the widest possible range of applications. Due to the novel formulation, excellent rub resistance is achieved with this series.

With the certification of the Extreme PSO SF series, we are consistently continuing our quest for environmentally friendly and sustainable products. The Cradle to Cradle™ concept is based on the idea of an efficient raw material cycle in which materials are reused as completely as possible. Both the responsible use of resources and continuous improvements are further foundations for the certification according to the Cradle to Cradle™ standard (further information: <http://www.c2ccertified.org>)

This ink series was evaluated against the criteria of the Material Health category of the Cradle to Cradle™ product standard and awarded the PLATIN level by the relevant Products Innovation Institute in San Francisco.

See also: <http://www.c2ccertified.org/products/mhcertificate/cc-printing-ink-series>

It also contains neither cobalt soaps nor mineral oil and complies with the specifications of all common European eco-labels for printed products, in particular DE-UZ 195 (Blue Angel).

---

**Epple Druckfarben AG**

Gutenbergstr. 5 · 86356 Neusäß · Germany · Tel. +49 821 4603 0 · Fax +49 821 4603 200 · [info@epple-druckfarben.de](mailto:info@epple-druckfarben.de)

[www.epple-druckfarben.de](http://www.epple-druckfarben.de)

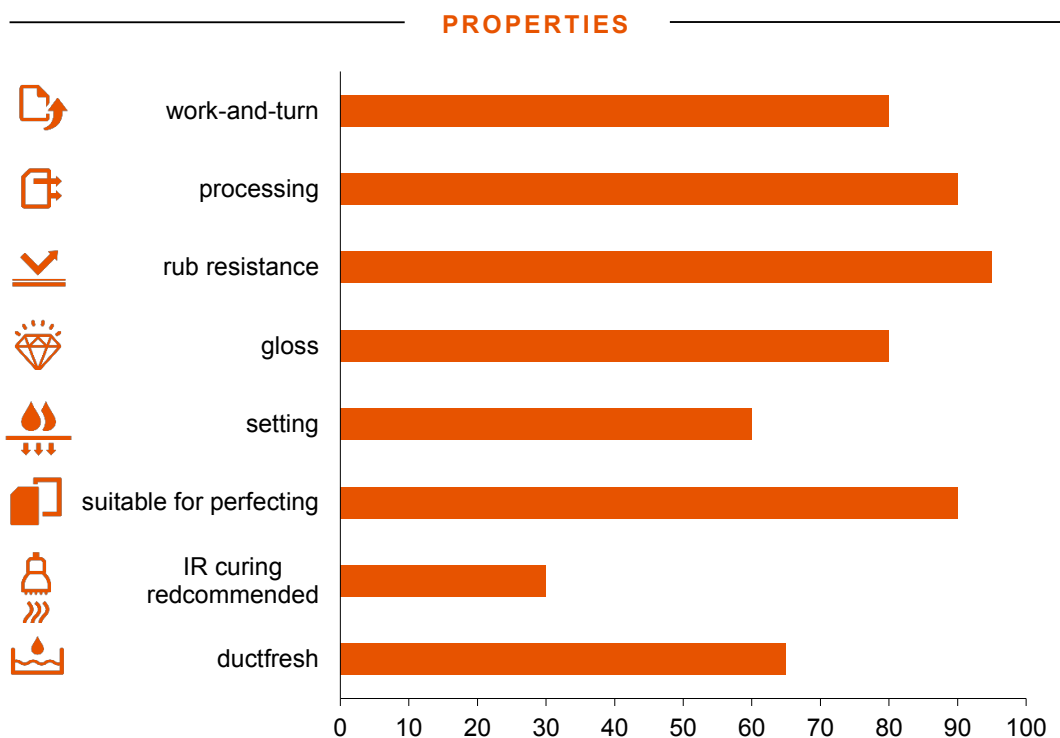
COMMERCIAL PRINTING INKS  
EXTREME PSO SF

Extreme PSO SF is especially suitable for multicolor presses for perfecting at high printing speeds, as well as for straight printing presses. Due to its excellent ink-water balance, it has a very low tendency to mist even at high printing speeds. It is mineral oil-free and formulated on the basis of renewable raw materials.

The Extreme PSO SF series is characterised by:

- Excellent runability
- Very good rolling
- Excellent ink/water balance
- Fast absorption speed
- Excellent rub resistance
- Very low misting tendency

As a modern ink series, the Extreme PSO SF meets the requirements of ISO standard 2846-1. Its color strength and dot sharpness allow the printer to meet all the conditions of ISO standard 12647-2 regarding the ink properties, as well as to achieve a very neutral gray balance.



**FASTNESSES**

	item no.	light	transp.	spirit	nitro	alcali
Extreme PSO SF Y	122615	5	+	+	+	+
Extreme PSO SF M	122616	5	+	+	+	-
Extreme PSO SF C	122617	8	+	+	+	+
Extreme PSO SF B	122618	8	-	+	+	+
Extreme PSO SF* Y	134714	6-7	+	+	-	+

+ property given                      - property not given

*\*) The C2C-MHC PLATIN status can only be achieved using the color yellow 134714, whose color shade does not correspond to the standard process yellow due to the pigment used, in order to achieve the ISO 12647-2 standard*

**PRINTING ADDITIVES**

Additiv	Item No.	Dosage
Printing Oil	071	max. 5 %
Thinner	455	max. 5 %
Printing Jelly	348	max. 6 %
Rapid Drier liquid	058	max. 3 %
Eppo Drier viscous	2001	max. 3 %

Note: This technical description is intended to inform and advise you. It corresponds to our current state of knowledge. However, since the specific application depends on a number of factors over which we have no influence, no guarantee and liability for the pressure failure can be derived.



# Epple Extreme PSO

**ISSUED TO** Epple Druckfarben AG

**STANDARD** 3.1

**EXPIRES** 24 September 2023

**LEAD ASSESSMENT BODY**

EPEA GmbH - Part of Drees & Sommer

**PHASES AND PROCESSES CONSIDERED IN THE CHEMICAL TOXICITY ASSESSMENT**

Final manufacturing, professional use; Intended end of use: recycling; Unintended end of use: landfilling, release to the environment

**PRODUCTS COVERED**

Epple Extreme PSO (134714, 122616, 122617, 122618)

This product was assessed exclusively for use by professional printers trained in the proper handling and use of protective equipment for sensitising and irritating inks. The requirements for certification have only been met under these conditions.

**PRODUCT OPTIMIZATION SUMMARY**

- Cradle to Cradle Certified*® Banned List compliant
- Material Health optimization strategy not required
- No exposure from carcinogens, mutagens, or reproductive toxicants
- VOC emissions testing not required for this product type
- Product is fully optimized - does not contain any GREY or x-assessed chemicals
- Process chemicals have been identified and none are GREY or x-assessed

PERCENTAGE OF  
 CHEMICAL SUBSTANCES  
 ASSESSED BY WEIGHT

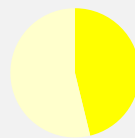
100%

Inventory threshold for chemicals in  
 each material = 100 ppm

ASSESSMENT RATINGS  
 BY WEIGHT



a or b: 30-50%



c: 46.2-100%



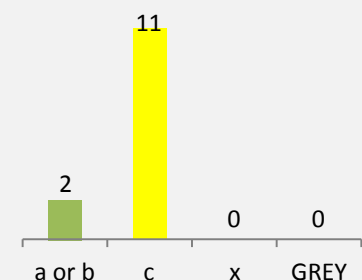
x: 0%



GREY: 0%

% CHEMICAL SUBSTANCES

PRODUCT  
 OPTIMIZATION



13 CHEMICAL SUBSTANCES

# Material Health Certificate Guide

The Material Health Certificate is awarded to products assessed against the requirements in the Material Health category of the *Cradle to Cradle Certified®* Product Standard. The Material Health achievement level (Basic, Bronze, Silver, Gold, or Platinum) is shown in the certificate's upper right corner. A Material Health Certificate does not indicate that a product is *Cradle to Cradle Certified®*, which requires assessment against all five Standard categories.

The *Cradle to Cradle Certified®* Material Health Assessment Methodology is a contextual assessment based on chemical hazard identification and qualitative exposure considerations during a product's final manufacture, use, and end-of-use. The exposure assessment is highly simplified and more conservative compared to a conventional, quantitative risk assessment.

## Definitions of Administrative Fields

Field	Definition
Issued To	Company that sells the assessed product(s).
Assessed By	<a href="#">Assessment Body responsible for conducting the product assessment.</a>
Expires	Date the certificate expires. Certificate renewal is required biennially.
Standard	Version of the Standard (Material Health subsection only) the product was assessed against.
Phases and Processes Assessed	Manufacturing, use, and end-of-use phases and processes that the assessor considered in the exposure portion of the Material Health assessment. Assessment results are only valid for those listed.
Products Covered	Products included in the scope of the certificate. Certificates may cover multiple product variations.

## Definitions of Product Optimization Summary Fields

### ***Cradle to Cradle Certified®* Banned List compliant**

The product's materials are not known to contain chemicals on the Banned Lists of Chemicals above permitted thresholds.

### **Material Health optimization strategy developed**

Plan developed to phase out x assessed chemicals and assess GREY content.

### **No exposure from carcinogens, mutagens, or reproductive toxicants**

Assessed materials do not contain carcinogens, mutagens, or reproductive toxicants with plausible exposure routes.

### **Meets VOC emissions testing requirements**

The product meets the volatile organic compound (VOC) emissions testing requirements described in the Standard.

### **Does not contain any GREY or x-assessed chemicals; product is fully optimized**

The product's materials contain chemicals with only a, b, or c risk ratings (no GREY or x). (Note: In the *Cradle to Cradle Certified®* Material Health Assessment Methodology, chemicals in each material are assigned a, b, c, x, or GREY risk ratings. Each material is then assigned an A, B, C, X, or GREY final assessment rating based on the risk ratings of its constituent chemicals. The following table explains the rating system.)

a or b (A or B)	Optimal
c (C)	Moderately problematic, but acceptable for use
x (X)	Highly problematic; targeted for phase out
GREY	Considered unassessed due to unknown identity or lack of toxicity information

### **Process chemicals have been identified and none are GREY or x-assessed**

All process chemicals have been assessed and received an a, b, or c risk rating (no x-assessed or GREY).

### **Percentage Assessed by Weight**

For single-material products, the cumulative percentage of assessed chemicals (a, b, c, and x). For other products, the cumulative percentage of assessed materials (A, B, C, and X). When a certificate represents a group of products, a percent range is shown.

### **Assessment Ratings by Weight**

For single-material products, the percentage of a or b (shown in green), c (shown in yellow), and x (shown in red) assessed chemicals. For other products, the percentage of A or B (shown in green), C (shown in yellow), and X (shown in red) assessed materials. When a certificate represents a group of products, percent ranges are shown.

### **Product Optimization**

Number of materials (or chemical substances for single-material products and multi-material product groups with uncountable color variations) assigned each assessment rating.

*Cradle to Cradle Certified®* is a trademark of the Cradle to Cradle Products Innovation Institute

All other marks are the property of their respective owner.