



Ink Catalogue



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Teca-Print Color Pad Printing Inks

Properties and possible application

A *New, modern resin system for high coverage pigmentation*

TPC 118

Universal usage 1-component pad printing ink

A high coverage, stable ink giving good adhesion and a silk-like finish onto varying synthetic materials (PVC, ABS, PC, PS). This ink is used for technical / industrial and graphical (decorative) purposes and is suitable for exterior as well as interior usage.

TPC 128

1-component pad printing ink onto PP

A high coverage, stable silk matt ink giving good adhesion onto pre-treated and non pre-treated polypropylene synthetics materials and its Co-polymers.

TPC 508

Highly resistant 2-component pad printing ink

A high coverage, stable silk-like finish ink giving good adhesion onto a variety of synthetic materials (acrylic-glass, PA, polyester, PE, PP) and metals such as thermosets.

A user-friendly system for technical / industrial applications where high chemical and mechanical resistance is required.

TPC 528

*Universal and highly resistant
1- and 2-component pad printing ink*

A high coverage, stable silk-like finish ink giving good adhesion onto various synthetics materials and metals such as themosets. A user-friendly system with good printability and quick drying for technical / industrial long term exterior applications.

TPC 558

Extremely elastic 2-component pad printing ink

A high coverage, stable, glossy and extremely elastic ink suitable for printing onto various thermo-plastic materials and diverse rubber materials. User-friendly system for technical industrial areas for high chemical and mechanical strains for external use.

Teca-Print Color Pad Printing Inks

Properties and possible applications

B *Reliable, ink system with good coverage pigmentation*

TPC 140

Universal stable 1-component pad printing ink

The TPC 140 gives high mechanical resistance on to polystyrene and its copolymerisates such as ABS & SAN. It's perfect for CAB, PMMA (acrylates), rigid and non-rigid PVC and is highly weatherproof.

A quick drying ink system giving a silk gloss to gloss finish.

TPC 180

Very universal 1- and 2-component pad printing ink

This glossy and quick drying ink system is known for its excellent coverage. It can be used for a wide spectrum of thermoplastic materials as well as thermosets, wood, paper and metals.

This ink system is synonymous with a user friendly processing in open and sealed ink well systems and for rotary printing.

TPC 200

High resistant 2-component pad printing ink

Glossy and quick drying ink system giving adhesion for a wide range of substrates such as cellulose acetate, thermosets, polyamides, polyester, acetyl resins (post-treated), pre-treated polypropylene, metals and varnished substrates. Used for industrial and advertising application.

TPC 230

2-comp. pad printing ink with maximum resistance

Quick drying and glossy Ink. For a high chemical resistance against organic solvent, chemicals, thinned alkalis and acids. The resistance against mechanical abrasion is substantially better compared with TPC 200. We obtain the best adhesion values with thermosets, varnished surfaces, metals, NE-metals, polyamide, polycarbonate, polyester, polymethacrylate, polyurethane and rigid-PVC.

Application is particularly suited where adhesion is of prime importance.

TPC 250

2-component pad printing Ink for glass and bottle printing

Excellent ink for use onto thermosets including, ceramics, metals; including chromed, nickel, gilded or rhodanised surfaces and especially onto glass. Mixed with HG hardener, perfect adhesion is achieved by a forced curing with 140°C/20...30 min. It's not only chemically and mechanically resistant, but also boasts a high brilliance.

TPC 261

2-component pad printing ink with high resistance

Glossy and quick drying ink system giving a wide range of adhesion onto several substrates such as polyolefine (PE/PP), thermoplasts, thermosets, partially metals and varnished substrates.

TPC 311

Universal 1- and 2-component pad printing ink

This silk gloss and quick drying ink system is known for its excellent coverage and is specially formulated for thermoplastic materials. It can be used as a one or two component ink.

Pad Printing Ink Supplies

Standard ink types, descriptions

Our extensive ranges of inks are supplied in 1 l or 1 kg quantities. All inks are also available in practical 200 ml tubes.

Bronze tones can be supplied in cans of the same volumes.

Solvents and additives are supplied in 1 l, 5 l and 25 l quantities.

Hardener is available in 100 ml tubes and 1 l cans.

Shown in the table below are the part numbers and quantities available for the various inks.

A

Description	Ink Type	Article No. -200 ml tubes-	Article No. -1 kg cans- (white 60: 2 kg tins)
1-component Ink	TPC 118 TPC 128	F11 xxxxx 2 F12 xxxxx 2	F11 xxxxx 6(7)* F12 xxxxx 6(7)*
2-component ink	TPC 508 TPC 558	F50 xxxxx 2 F55 xxxxx 2	F50 xxxxx 6(7)* F55 xxxxx 6(7)*
1- and 2- component ink	TPC 528	F52 xxxxx 2	F52 xxxxx 6(7)*

B

Description	Ink Type	Article No. -200 ml tubes-	Article No. -1 l cans-
1-component ink	TPC 140	F14 xx 8xx 2	F14 xx 8xx 4
2-component ink	TPC 200 TPC 230 TPC 250 TPC 261	F20 xx 8xx 2 F23 xx 8xx 2 F25 xx 8xx 2 F26 xx 8xx 2	F20 xx 8xx 4 F23 xx 8xx 4 F25 xx 8xx 4 F26 xx 8xx 4
1- and 2- component ink	TPC 180 TPC 311	F18 xx 8xx 2 F31 xx 8xx 2	F18 xx 8xx 4 F31 xx 8xx 4

xx: When ordering fill in the number of the ink tone required
(7)* = 2 kg opaque white

Pad Printing Ink Supplies

Mixing systems, recipes, special ink orders

A TPC 118 - TPC 128 - TPC 508
TPC 528 - TPC 558

The high coverage PC-mixing system comprises of 7 opaque colors and black and white. In addition to these are 4 translucent colors and a clear varnish. The recipe data for the PC-mixing system are formulated using TPC 528. For other ink ranges alterations must be made. Under these circumstances please ask for the exact recipe.

B TPC 140 - TPC 180 - TPC 200
TPC 230 - TPC 250 - TPC 261 - TPC 311

For these ink ranges the GF- and MG-mixing systems are available with 9 and 10 respectively color shades and black and white. Included is a clear varnish.

We have recipes for over 1000 color shades available which are free of charge for **printing onto white**. Data can be ordered for HKS, RAL and PMS. Please order our recipe catalogue.

For printing onto dark substrates, transparent articles and mirror areas special shades are formulated. For this we require the exact shade reference (PMS, HKS, RAL or a sample) and the color shade of the substrate (preferably the original).

We will endeavour to deliver special recipes as quickly as possible. In special circumstances the delivery times may be extended.

Special Ink Shades - Description

Example: Ink type / Special shade No.

F20 00107 4	=	TPC 200	/ 00107-NT
F18 60821 4	=	TPC 180	/ 60821-NT
F52 72134 6	=	TPC 528	/ 72134-NT

Additives Supplies

System A + B

Description	System		Available Container Sizes				
	type	A / B	100 ml tube	1 kg can	1 l can	5 l can	25 l barrel
Hardener							
	HA	A	F98 00023 1	F98 00023 6			
	HB	A	F98 00024 1	F98 00024 6			
	HC	A	F98 00025 1	F98 00025 6			
	HG	B	F91 00021 1		F91 00021 4		
	HM	A	F98 00021 1	F98 00021 6			
	HN	B	F91 00022 1		F91 00022 4		
	HP	B	F94 00021 1		F94 00021 4		
	HR	B	F91 00024 1		F91 00024 4		
	HV	A	F98 00022 1	F98 00022 6			
Solvent							
<i>Thinner</i>	VC	B			F94 00002 4	F94 00002 5	
	VD	B			F91 00001 4	F91 00001 5	
	VF	B			F91 00004 4		
	VG	B			F91 00005 4	F91 00005 5	
	VM	A			F98 00001 4	F98 00001 5	F98 00001 8
	VO	A			F98 00003 4	F98 00003 5	F98 00003 8
	VP	A			F98 00002 4	F98 00002 5	F98 00002 8
	VQ	A			F98 00005 4		
	VR	A			F98 00004 4	F98 00004 5	F98 00004 8
	VS	B			F91 00002 4	F91 00002 5	
	VX	B			F91 00003 4		
<i>Retarder</i>	ZF	B			F94 00011 4		
	ZG	B			F91 00012 4		
	ZM	A			F98 00011 4	F98 00011 5	F98 00011 8
	ZU	A			F98 00012 4	F98 00012 5	F98 00012 8
<i>Cleaner</i>	RE	A/B			F91 00031 4	F91 00031 5	F91 00031 8
	RB	A/B			F98 00032 4	F98 00032 5	F98 00032 8
Special additives							
<i>Anti-static agent</i>	AS	A/B			F98 00041 4		
<i>Anticorrosive</i>	AK	A/B			F91 00046 4		
<i>Integrator</i>	BM	A/B			F98 00043 4		
<i>Bounding agent</i>	MT	A/B			F91 00043 4		
<i>Matt powder</i>	MP	A/B			F91 00042 4		
<i>Adhesion promoter</i>	PP	A/B			F94 00045 4		
<i>Flow agent</i>	MV	A/B			F91 00044 4		



TPC.../10-NT

Art. No. F. 10.00
Hellgelb · Light Yellow
Jaune Clair



TPC.../11-NT

Art. No. F. 11.00
Dunkelgelb · Dark Yellow
Jaune Foncé



TPC.../12-NT

Art. No. F. 12.00
Orangegelb · Orange Yellow
Orange Jaune



TPC.../15-NT

Art. No. F. 15.00
Orange · Orange
Orange



TPC.../17-NT

Art. No. F. 17.00
Ocker · Ochre
Ocre



TPC.../20-NT

Art. No. F. 20.00
Hellrot · Light Red
Rouge Clair



TPC.../21-NT

Art. No. F. 21.00
Rot · Red
Rouge



TPC.../22-NT

Art. No. F. 22.00
Dunkelrot · Dark Red
Rouge Foncé



TPC.../25-NT

Art. No. F. 25.00
Pink · Pink
Rose



TPC.../30-NT

Art. No. F. 30.00
Leuchtblau · Luminous Blue
Bleu Lumineux



TPC.../31-NT

Art. No. F. 31.00
Blau · Blue
Bleu



TPC.../32-NT

Art. No. F. 32.00
Dunkelblau · Dark Blue
Bleu Foncé



TPC.../33-NT

Art. No. F. 33.00
Schwarzblau · Black Blue
Bleu Noir



TPC.../34-NT

Art. No. F. 34.00
Hellblau · Light Blue
Bleu Clair



TPC.../37-NT

Art. No. F. 37.00
Violett · Violet
Violet



TPC.../40-NT

Art. No. F. 40.00
Hellgrün · Light Green
Vert Clair



TPC.../41-NT

Art. No. F. 41.00
Dunkelgrün · Dark Green
Vert Foncé



TPC.../42-NT

Art. No. F. 42.00
Blaugrün · Turquoise
Vert Bleu



TPC.../50-NT

Art. No. F. 50.00
Hellbraun · Light Brown
Brun Clair



TPC.../51-NT

Art. No. F. 51.00
Dunkelbraun · Dark Brown
Brun Foncé



TPC.../60-NT

Art. No. F. 60.00
Deckweiß · White
Blanc

Achtung: Farben auf dem **Computerbildschirm** (wie in diesem elektronischen Dokument) sind nur ein **Anhaltspunkt** und stimmen nur ungefähr mit den **tatsächlichen Farbtönen** überein.

Nur auf einer mit echter Teca-Print Color Tampondruckfarbe bedruckten **Farbkarte** sehen Sie die Farbtöne im Original in ihrer echten Brillianz, bestellen Sie deshalb die **gebundene Ausgabe dieses Farbkataloges**.

Wichtig: Je nach **Material** und **Farbe des Untergrunds** kön-



TPC.../65-NT

Art. No. F. 65.00
Deckschwarz · Black
Noir

Euroskala-Lasurfarben

Process Colours
 Couleurs pour quadrichromie

Das Euroskala-System ist nur auf Weiss gültig



TPC.../80-NT

Art. No. F. 80.00
 Europa-Yellow · Europa-Yellow
 Europa-Yellow



TPC.../81-NT

Art. No. F. 81.00
 Europa-Magenta · Europa-Magenta
 Europa-Magenta



TPC.../82-NT

Art. No. F. 82.00
 Europa-Cyan · Europa-Cyan
 Europa-Cyan



TPC.../83-NT

Art. No. F. 83.00
 Europa-Black · Europa-Black
 Europa-Black

Achtung: Farben auf dem **Computerbildschirm** (wie in diesem elektronischen Dokument) sind nur ein **Anhaltspunkt** und stimmen nur ungefähr mit den **tatsächlichen Farbtönen** überein.

Nur auf einer mit echter Teca-Print Color Tampondruckfarbe bedruckten **Farbkarte** sehen Sie die genauen Farbtöne, bestellen Sie deshalb die **gebundene Ausgabe dieses Farbkataloges**.

Wichtig: Je nach **Material** und **Farbe des Untergrunds** können leichte Abweichungen entstehen

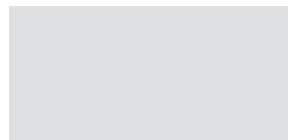
Metall-Effektfarbtöne

Metal Colour Tones
 Encre à effet métallique



TPC.../73-NT

Art. No. F. 73.00
 Dukatengold · Ducat gold
 Or Ducat



TPC.../74-NT

Art. No. F. 74.00
 Britannia-Silber · Britannia-Silver
 Argent Britania



TPC.../75-NT

Art. No. F. 75.00
 Gold hell · Bright Gold
 Or Clair



TPC.../76-NT

Art. No. F. 76.00
 Gold mittel · Medium Gold
 Or Moyen



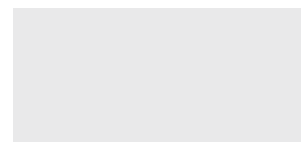
TPC.../77-NT

Art. No. F. 77.00
 Bronze · Bronze
 Bronze



TPC.../78-NT

Art. No. F. 78.00
 Kupfer · Copper
 Cuivre



TPC.../79-NT

Art. No. F. 79.00
 Silber · Silver
 Argent

Tagesleucht-Farbtöne

Fluorescent Colour Tones
 Encre Fluorescente

Der optimale Effekt wird nur auf Weiss erreicht



TPC.../90-NT

Art. No. F. 95.90
 Neongelb · Fluorescent Yellow
 Jaune Fluorescente



TPC.../91-NT

Art. No. F. 95.91
 Neongelb-Orange · Fluorescent Yellow Orange
 Jaune Orange Fluorescente



TPC.../92-NT

Art. No. F. 95.92
 Neonorange · Fluorescent Orange
 Orange Fluorescente



TPC.../93-NT

Art. No. F. 95.93
 Feuerrot · Fire Red
 Rouge Ardent



TPC.../94-NT

Art. No. F. 95.94
 Neocyclusamen · Fluorescent
 Cyclamen Fluorescente



TPC.../95-NT

Art. No. F. 95.95
 Neongrün · Fluorescent Green
 Vert Fluorescente



Reference Chart: Adhesion onto Substrates

Group >	A	A	A	A	A	Group >	B	B	B	B	B	B	B	B		
System >	1-comp. ink	1-comp. ink	1/2-comp. ink	2-comp. ink	2-comp. ink	System >	1-comp. ink	1/2-comp. ink	1/2-comp. ink	2-comp. ink	2-comp. ink	2-comp. ink	2-comp. ink	1-comp. ink		
Ink ref. >	TPC 118	TPC 128	TPC 528	TPC 508	TPC 558	Ink ref. >	TPC 140	TPC 180	TPC 311	TPC 200	TPC 230	TPC 250	TPC 261	TPC 460		
SUBSTRATE	Special >		poly-prop. ink	general purpose		rubber/elast.	SUBSTRATE		general purpose	general purpose		increased resist.	ink for glass		stoving system	
Polyolefine																
Pre-treated Polyethylene	PE	++		1-c +/2-c ++	(++)		PE		+++	++	(++)	(++)		(++)		
Pre-treated Polypropylene	PP	++	+++	1-c +/2-c ++	(++)		PP		+	1-c +PP/2-c +	(++)	(++)		(++)		
Thermoplaste																
Polystyrene	PS / SB	+++ (VP)	++	2-comp. = ++	(++) (VP)		PS / SB	+++	++	+	+	(++)				
Styrene	ABS	+++ (VP)		1-c ++/2-c ++	(++) (VP)		ABS	+++	++	++	++	(++)				
	SAN	+++ (VP)		1-c +/2-c ++	(++) (VP)		SAN	+++	++	++	++	(++)				
Linearized Polyester	PET			1-c +/2-c ++			PET			1-c +/2-c ++	(++)	(++)				
	PET-A, -E, -P			1-c +/2-c ++	(++)		PET-A, -E, -P			1-c +/2-c ++	(++)	(++)				
	PET-G	++		1-c ++/2-c ++	(++)		PET-G			1-c +/2-c ++	(++)	(++)				
Polyvinylchloride	rigid PVC	+++		1-c ++/2-c ++	(++)		rigid PVC	+++	++	++		(++)				
	flexible PVC	++		1-c + / 2-c +			flexible PVC	+++								
Cross-linked Polyacrylate	PAN						PAN		++	1-c ++/2-c ++				++		
Polymethylmethacrylate	PMMA	+ / ++		1-c +/2-c ++	(++)		PMMA	++	++	1-c ++/2-c ++	(++)	(++)		(++)		
Cross-linked Polymethacrylate	AMMA / MBS			1-c +/2-c ++	(++)		AMMA / MBS		++	1-c ++/2-c ++	(++)	(++)		(++)		
Polybutylenterphthalate	PBT			1-c ++/2-c ++	++		PBT									
Pre-treated Polyester		+ / pre-tr.++	+ / pre-tr.++	1-c ++/2-c ++	+ / vorb.++	(++)				2-comp. = +	2-comp. = ++	++	++	++	++	
Polycarbonate	PC	++	++	1-c ++/2-c ++	(++)		PC	++	++	2-comp. = ++		(++)		(++)	++	
Nylon	PA			1-c + / 2-c +	+++		PA			2-comp. = ++	2-comp. = ++	++	++	++	++	
Polyurethane	PUR			2-comp. = +		++	PUR			2-comp. = +	2-comp. = ++	++	++	++	++	
Celluloseacetate	CA	++	++	1-c ++/2-c ++	++		CA	++		++	++					
Celluloseacetobutyrate	CAB	++		1-c ++/2-c ++	++		CAB	++		+	++					
Polyoxide -> flamed																
Polymethylenoxyde / Polyacetal	POM				++		POM			2-comp. = +		++			++	
	POM-C				++		POM-C			2-comp. = +		++			++	
Thermosets																
Thermosets, all					++	(++)	spec. onto IC			2-comp. = +		++	++	++	++	+++
Phenols	MPF / PPO			1-c +/2-c ++	++	(++)	MPF / PPO			2-comp. = +		++	++	++	++	+++
Aminoplaste				1-c +/2-c ++	++	(++)				2-comp. = +		++	++	++	++	+++
Fe-metals																
Rust free steel	V2A, V4A				+ / ++		V2A, V4A							+ / ++		
Steel / iron	Fe			2-comp. = +	++	(++)	Fe			2-comp. = +	2-comp. = +	++	+	++	+	+++
Non ferrous-metals																
ALU, oxidised, brushed	Al			5:1HM=+++	++	(++)	Al			2-comp. = +	2-comp. = +	+	++	++	++	+++
Chrome / plated	Cr			2-comp = +	++	(++)	Cr					+	+	++	++	+++
Copper	Cu			2-comp = +	++	(++)	Cu					+	+	++	++	+++
Brass	Brass			2-comp = +	++	(++)	Brass					+	+	++	++	+++
Nickel / plated	Ni			2-comp = +	++	(++)	Ni					+	+	++	++	+++
Tin / plated	Sn			2-comp = +	++	(++)	Sn					+	+	++	++	+++
Zinc / plated	Zn			2-comp = +	++	(++)	Zn									+++
Lacquered surfaces																
1-component-lacquer		++		2-comp = ++	+	(++)		++		1-c ++/2-c ++	1-c ++/2-c ++	++	++		++	+++
2-comp.-/UV-/Powder lacquer				2-comp = ++	+	(++)				2-comp. = ++		+	+			+++
Other materials																
Glass, ceramics	somet. enamelled				20:1HV=+++	+	somet. enamelled					+		20:1HG=+++	+	++
Wood, uncoated		++	++	++	(++)	(++)		++	++	++	++					
Paper / board		++	++	++	(++)	(++)		++	++	++	++					
Leather / man-made leather				+						++	++				+	
Elastomers																
Untreated rubber	Rubber					+	Rubber			2-comp. = +						
Thermoplastic Elastomer	other TPE					+	other TPE									

+ = limited suitability ++ = suitable +++ = especially suitable
(++) = suitable: provided these inks are suitably prepared in conjunction with special attention to the chemical and/or mechanical resistance, water resistance, drying, stoving or other special ink properties.

PLEASE READ THE TECHNICAL DATA SHEETS WITH REGARDS TO THE PAD PRINTING INKS AND ADDITIVES!



Referent Chart: Ink Properties and Hardener

Group >	A	A	A	A	A	B	B	B	B	B	B	B	B
System >	1-comp. ink	1-comp. ink	1/2-comp. ink	2-comp. ink	2-comp. ink	1-comp. ink	1/2-comp. ink	1/2-comp. ink	2-comp. ink	2-comp. ink	2-comp. ink	2-comp. ink	1-comp. ink
Ink ref. >	TPC 118	TPC 128	TPC 528	TPC 508	TPC 558	TPC 140	TPC 180	TPC 311	TPC 200	TPC 230	TPC 250	TPC 261	TPC 460
INK PROPERTIES		poly-prop. ink	general purpose		rubber/elast.		general purpose	general purpose		increased resistant	ink for glass		stoving system
Coverage	HD, very good	HD, very good	HD, very good	HD, very good	HD, very good	good	good/HD part. avail.	good	good/HD part. avail.	good/HD part. avail.	good	good	good
Gloss grade *													
matt		x											
gloss					x	x	x	x	x	x	x	x	x
silk finish	x		x	x		x							
Drying													
Touch dry (room temp.) min	1	1	2... 3	1	2	0,5 ... 1	3	2 ... 3	1	2	15	5	
With heat sec	20	20	60	30	60	10	60	120	60	60	60	120	IR, 160°C ~4
Through drying at room temp. days	1	1	1	---	---	5 ... 10 min	1	2	---	---	---	1	---
Oven C°/min	50/30	50/30	max. 140/30	max. 160/30	max. 140/20-30	140/20	140/20	140/20	140/20	140/20	140/20	140/20	140/20
Thermodiffusion	---	---	possible	possible	---	---	possible	possible	possible	possible	possible	possible	see data sheet
Curing													
Physically	x	x	x	x	x	x	x	x	x	x	x	x	x
Chemically (2-comp.) days	(2-comp. = 6)	(2-comp. = 6)	2-comp. = 5	approx. 3	6	---	2-comp. = 6	2-comp. = 6	5-6	5-6	5-6	6	stoving
Oxidation													
Overprintable until max. hours	(2-comp. = 15)	(2-comp. = 15)	2-comp. = 15	2-comp. = 12	2-comp. = 15		2-comp. = 15	2-comp. = 15	2-comp. = 15	2-comp. = 15	2-comp. = 15	2-comp. = 15	before stoving
Resistance: **chemical													
Different solvents	++/ 2-c = +++	++	2-comp. = ++	+++	+++		2-comp. = ++	2-comp. = ++	++	+++	++/waterproof	++	+++
Alcoholic cleaner	++/ 2-c = +++	++	2-comp. = ++	+++	+++	+	2-comp. = ++	2-comp. = ++	++	+++	++	++	+++
Organic solvents	++/ 2-c = +++	++	2-comp. = ++	+++	+++		2-comp. = ++	2-comp. = ++	++	+++	++	++	+++
Oil and fats	++/ 2-c = +++	+	2-comp. = ++	+++	+++				++	+++	++	++	+++
Alkali / Acids thinned	+ / 2-comp. = +		2-comp. = +	+	+++				++	+++	+ / Tri-resistant	++	+++
Petroleum	++/ 2-c = +++	+	2-comp. = +	+++	+++				++	+++	++	++	+++
Washing liquid	++/ 2-c = +++	++	2-comp. = ++	+++	+++		2-comp. = ++	2-comp. = ++	++	+++	++	++	+++
Resistance: ***mechanical													
good		+	+			+	+	+					
very good	++			++			2-comp. = ++	2-comp. = ++	++		++	++	++
excellent					+++					+++			
Ink film-properties	dep. on hardener	---	dep. on hardener	rather brittle	perm. elastic	deep-draw-able	hard/brittle	hard/brittle	brittle	highly brittle	slightly brittle	brittle	hard/brittle
Water resistance ****	++		with HA = ++	with HA = ++	with HA = ++	yes							yes
Lightfastness *****	6-8	6-8	6-8	6-8	6-8	7-8	7-8	5-8	7-8	7-8	7-8	6-8	7-8
Storage Life (at 20-25°C/20-70%RAH)													
Inks years	2	2	2	2	2	5	3	1 ... 2	5	5	5	1	1
Hardener yeras	1	1	1	1	1	1	1	1	1	1	1	1	---
Bronze Inks months	6	6	6	6	6	6	6	6	6	6	6	6	---

PLEASE READ THE TECHNICAL DATA SHEETS WITH REGARDS TO THE PAD PRINTING INKS AND ADDITIVES!

HARDENER PROPERTIES

Hardener	Treatment			Properties					
	Reactivity	Heat curing °C / min	Room temp. min > °C	Resistance			Gloss	Flexability	Specials
				chemical	mechanical	UV-Resistance			
HA	slow	140 / 20-30	> 20			UV-resistant	++	++	moisture sensitive
HB	+++	140 / 20-30	> 23	++	++	UV-resistant	++	++	moisture sensitive
(HC)	++	140 / 20-30	> 20	+++	+++	UV-resistant	+++	++	only with TPC 548
HG	++	140 / 20-30	no informations	++/waterproof	++		++		stoving /glass
HM	+++	140 / 20-30	> 20	+++	+++			hard	moisture sensitive
HN	++	140 / 20-30	> 10	++	++		++	hard	
HP	++	140 / 20-30	> 15	++	++		++	hard	
HR	++	140 / 20-30	> 20	++	++	UV-resistant	++	hard	
HV	++	160 / 20-30	> 20	+	+				stoving /glass

PLEASE READ THE TECHNICAL DATA SHEETS CAREFULLY WITH REGARDS TO THE ADDITIVES IN THE HARDENER SECTION!

- * Gloss of a black surface onto matt, white surfaces. 60° angle, BYK-trigloss-measuring machine. Color tones give mostly higher values.
- ** Chemical properties test. Number of double strokes. With a test medium - soaked cotton towel, until a strong alteration to the surface can be seen.
- *** Mechanical properties test. Rubtest with velvet offset paper until the surface area changes, hand rubbed, 20 double strokes.
- **** Combination of raw material data, experience and trials with the weatherometer Q-UV-panel (3000h cycle change test).
- ***** The fluorescent colors are an exception. Lacquer or white blends do reduce the lightfastness significantly.

Further information from Teca-Print AG: All details are based on laboratory tests in conjunction with practical experiences and daily usage.

This data is non-binding and cannot replace the necessary print trials.



Reference Chart: Inks Available

Group >	A	A	A	A	A	B	B	B	B	B	B	B	B
System >	1-comp. ink	1-comp. ink	1/2-comp. ink	2-comp. ink	2-comp. ink	1-comp. ink	1/2-comp. ink	1/2-comp. ink	2-comp. ink	2-comp. ink	2-comp. ink	2-comp. ink	1-comp. ink
Ink ref. >	TPC 118	TPC 128	TPC 528	TPC 508	TPC 558	TPC 140	TPC 180	TPC 311	TPC 200	TPC 230	TPC 250	TPC 261	TPC 460
INK COLOR SUPPLIED		PP-ink	multi layered		rubber/elast.		multi layered	multi layered		increased resistant	ink for glass		stoving system
Relevant supplies												white/black	white../60
Standard ink tones	HD	HD	HD	HD	HD	x	x	x	x	x	x	on request	on request
Metal color tones	HD	HD	HD	HD	HD	x	x	x	x	x	x	on request	on request
Process colors	x	x	x	x	x	x	x	x	x	x	x	on request	on request
Fluorescent colors	HD	HD	HD	HD			x						
Mixing systems			PC - HD		--	GF / 1-comp.	GF / 1/2-comp.	MG	GF / 2-comp.	GF / 2-comp.	GF / 2-comp.	MG	---

All ink systems are only available in **NT-pigmentations** and **conform to EN - 71, part 3**, safety of toys, migration of certain elements.
HD = High coverage

Uses / Specialities / Valuable Information

THE PAD PRINT METHOD

Ink transfer in the pad printing process is achieved mainly due to an evaporation process. When the ink is placed into a cliché and exposed to air, it becomes tacky. While tacky, the pad can take the image up out of the cliché. This same process then allows the pad to place the ink on to the work-piece.

1. Pre-treatment of Polyofines

To obtain adhesion onto polyolefine materials such as Polyethylene (PE) and Polypropylene (PP) the materials must be pre-treated. The surface tension must be least 38 Dyn = 0.038 N/m. Using the TEST PEN (see accesories), whose ink is adjusted on this value, can test the tension of surface. If 0.038 N/m is not achieved more intensive pre-treatment is needed. Pre-treatment can also be achived by flammimg, corona treatment or primer/adhesion promoter MT.

2. Post-treatment of Polyoxides

Another material group, which demands special adhesion, are Polyoxide, e.g. Acetyl resin, Delrin, Hostaform C, etc. After the print the material must be treated with a heat shock reaction, this is called thermodiffusion. The heat shock of approx. 350°C can be generated with flammimg or thermodiffusion (hot air) equipment.

3. Curing time

2-component inks require in the region of 5-6 days for chemical curing. After this time optimal adhesion, chemical resistance and abrasion resistance is achieved. Further process can be undertaken after a short period of time - after the product is as good as touch dry. See table Ink properties.

4. Chemical resistance

Single component inks never have the same chemical resistances as 2-component inks. Single component inks are mainly used on materials, which are etched by the ink. In tese cases the substrate has no better chemical resistance than the printed ink itself.

5. Abrasion resistance

When a high need for abrasion resistance is demanded, 2 component ink should be used.

6. The viscosity process

All inks must be mixed to the correct viscosity. With two-component inks, it is critical that the ink and hardener are thoroughly mixed prior to adding the thinner component. If this is not observed, concentrations of hardener remain resulting in a breakdown in the ink transfer process and affect ink adhesion. The adjustment of the desired working viscosity happens through the addition of thinner in small amounts while constantly stirring. If thinner is added all at once or in too large quantities, the ink pigments are washed out of the resin. The ink components separate and ink shock occurs; rendering the ink unusable. During printing, thinner evaporates and ink grows thicker. Therefore, thinner must be replaced in regular intervals; again drop by drop. With the open ink well system the thinner is mixed with the ink with the use of a spatula after the removal of the doctor blade. The adjustment of the viscosity will differ depending on the ink color. Certain pigments cause thixotropic reactions. Both thixotropic and high-density inks can not be measured with the Viscospatula.

If you have reached good printing results with special ink before the end of the work, put some of the ink into a mixing cup, stir it well, and measure the viscosity. The next time you use the ink you will find the correct adjustment of viscosity in your notes.

7. The use of retarder

In normal case, the ink viscosity should be only adjusted by thinner. If exceptional influences of environment are existing as high room temperatures, draught, dry air, prolonged cycle time, among other things, retarder can be set in controlled quantities.

We recommend to produce an own retarder out of a determind mixture of thinner and retarder, for example 4:1, and adjust with this thinner the ink viscosity.

8. Flow agent

Flow agent is used to reduce the surface tension of the ink. Flow agent contains silicon and therefore only the smallest quantity should be added: 1 drop/10 g ink. Flow agent reduces ink adhesion!

9. Pot life

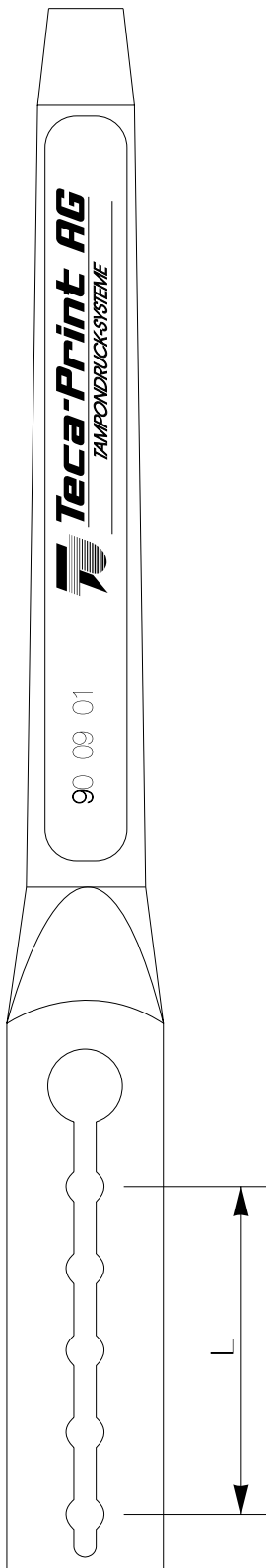
The 2-component ink systems cause a chemical reaction. Pot life is reduced by high room temperatures and relative air humidity (RAH).

The information of our data sheets and health & safety data sheets are supported by our present knowlege. This representation gives no assurance of product properties and on these grounds no contractual facts of the case. Its absolutely necessary before beginning the work to carry out some print and adhesion trials under local conditions, changes can occur at any time - in supply and technical matters - without appointment possible!

Accessories for Pad Printing Inks

Article No. and descriptions

Article No.	Description	
90 09 40	Mixing Cup Dimensions: H 90 mm / Ø 70 mm / Volume 200 ml	(100 pcs. package)
90 09 70	Mixing Cup Dimensions: H 120 mm / Ø 80 mm / Volume 300 ml	(100 pcs. package)
90 09 41	Mixing Cup Holder Dimensions: H 55 mm / Ø 70 mm / Ø Base 90 mm	
90 09 01	VISCOSPATULA Viscosity setting tool	
90 09 06	Squeezy Bottles SF 0,5 Bottle for various solvents	(0,5 l bottle)
90 09 25	Test Pen For measuring of the surface tension of PP and PE	
90 09 16	Spirit A milde cleaner	(1 l can)
90 09 52	BAR-COS Hand Cleaning Liquid Cleans tough hand stains	(1 l bottle)
90 09 53	BAR-RIX Skin Protection Cream Use to regulate skin PH values	(250 ml bottle)
90 09 54	BAR-LOC Liquid Gloves Liquid which gently cleans ink from the skin	(250 ml bottle)
90 00 10	Spray Adhesive KIWO FIX Adhesive glue, non-permanent	
90 09 21	Silicone Adhesive	(90 ml tube)
55 328 0001	WG-Gloves green, size: 7,5	
55 387 0002	WG-Gloves green, size: 9,5	
55 334 0003	Towels	
58 145 0001	All-purpose Cleaning Tissues	(600 pcs. package)
90 09 11	Double Sided Adhesive Tape -wide	
90 09 10	Double Sided Adhesive Tape -narrow	
58 209 0016	Cleaning Tape w = 50 mm	



L = Measuring distance

Instructions

1. Stir the ink to ensure thorough mixing of the pigment.
2. Place the Teca-Print mixing cup in the Teca-Print cup holder.
3. Pour the required amount of ink into a mixing cup.
4. Add the correct thinner slowly whilst stirring.
5. Hold the cup so the largest hole in the VISCOSPATULA is full of ink.
6. Lift the VISCOSPATULA vertically out of the ink.
7. Now the ink flows down the VISCOSPATULA.

Watch how the notches of the VISCOSPATULA open up from top to bottom.

The VISCOSPATULA has a slot with notches in it, these notches are used to indicate the viscosity (velocity of flow) of the ink, by measuring the time it takes the ink to flow from the slot.

The timing begins at the first notch and ends at the fifth (last) notch, measuring by using a clock.

Experience indicates that a time of about 8 seconds is advisable although this can vary slightly depending on ink type, color and particular ink usage.

If the ink behaves thixotropic (e.g. some ink tones with blue) the VISCOSPATULA isn't reasonably applicable. Such ink tones are adjustable with success with 15% solvent addition.

Conclusion:

If the flow time is too quick, and the ink too thin, addition of unthinned ink will thicken it up. If the flow time is longer then thinners should be added, small quantities at a time whilst stirring.

The VISCOSPATULA ensures that process control of ink mixing will give repeatable print results time after time.

Activation

With new pads the excess oil must be removed from the surface, in doing so extreme caution is advised.

To activate wipe the pad surface with thinners (VMVD/VC) using paper towel until the pad surface looks **mat** and **dry**, then pad is ready to print with.

Cleaning

Excess inks should be removed from the pad surface by application of the cleaning tape.

Warning!

Never rub the pads whilst dry or use dry paper to clean as this will damage the pad surface and lead to the "eraser rubber" effect.



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