PAD PRINTING INKS | PRODUCT RANGE

TAMPON PRINTING MACHINES
ACCESSORIES
SERVICE

Solvent and UV tampon printing inks

For "open" / "sealed" and rotary tampon printing systems

Standard inks in 23 ink shades

Special ink shades according to RAL, PMS, HKS, NCS

AMTEC

Distrubted by:
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made in germany
ORIGINAL

TAMPOPRINT®

Tampon printing machines
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Automations
DMD® Industrial Inkjet Systems

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since 2008
at our headquarters

Head office Germany

TAMPOPRINT® AG Germany, special machinery construction since 1978

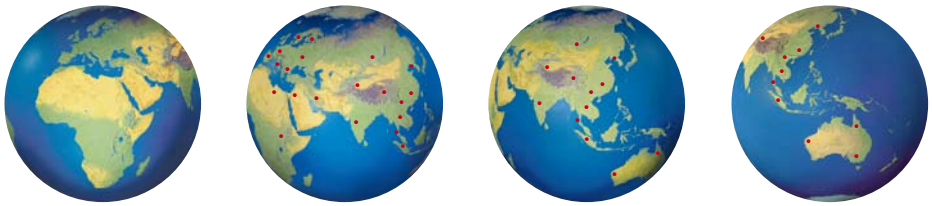
50th anniversary of company founder and inventor of industrial tampon printing, "Wilfried Philipp".

Head office Germany

Worldwide

A medium-sized, globally renowned, high-tech company based in the Stuttgart area, we have for almost fifty years offered a range of decorative and labelling technologies that offer unrivalled opportunities.
Since the discovery of the tampon printing process, possibilities in terms of marking and decorating have been subject to constant development. In addition to the new tampon printing machines, the ALFALAS® laser system technology has made a particular contribution to this.

In addition to the variety of standard models, the extensive range of tampon printing machines and laser marking systems also includes a large selection of standardised automated systems for the decorating and marking of print pieces of all types.
The best trained employees, state-of-the-art production facilities as well as effective organisational structures are taken for granted.
DIN ISO 9001 certification requirements are fulfilled.



TAMPOPRINT® Group
Global dealer network
(see www.tampoprint.de)

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*= These ink types are also available as basic inks. According to the RAL or Pantone ink mixing system.

Tampon printing inks in general

In tampon printing, both process screen printing inks (CMYK) and covering tampon printing inks in many different ink shades are used.

The extensive range of tampon printing inks now enables customers to select a tampon printing ink type tailored precisely to their needs. In addition, we always ensure that all the statutory standards and requirements of our customers correspond to the lowest possible burden on health.

Depending on the material to be printed and the resistance requirements of the tampon printing inks, 1- or 2-component inks are used.

UV tampon printing inks

For special requirements, we offer a UV tampon printing ink (1-component).

Preferentially used if high quality is demanded for rapid-running tampon printing systems.

Low solvent concentration corresponds with the increased environmental consciousness and ensures at the same time a reliable production flow with a high-quality printing result.

The immediate further processing due to short drying times is a clear investment for the future.

Our service

More and more importance is being placed upon the provision of rapid service in the standard and special ink types area and the ability to deliver basic ink types in standard and special ink shades. TAMPOPRINT® is able to guarantee this rapid service despite the wide range of ink types and shades it offers.

Material safety data sheets

Please ask for current material safety data sheets.

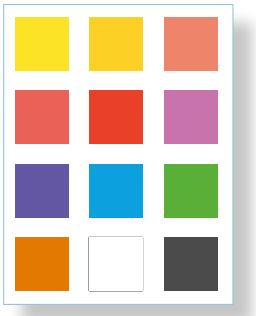
Important note

Generally all components used should be from one and the same manufacturer.
Generally ink shades from only one ink type should be mixed.
e.g.: Ink type "B" = ink shade 01 + ink shade 07.

Processing of other media in tampon printing

In addition to tampon printing inks, other media such as primers, adhesives and lubricants, silicone or soldering pastes, precious metals, electrically conductive pastes or thermally conductive pastes can also be transferred to your product in the tampon printing process.

In individual cases, the ability to do this must be checked and tested by our application technology department.



Basic inks

Using 12 basic ink shades, we offer our customer the option of mixing their own special ink shades. We will be happy to advise you or provide you with a wide range of recipes.
Ink types: HS, N, O, Q, R, B and P on request.
Our ink mixing system according to RAL and Pantone can be obtained as an Acrobat PDF file on request. HKS ink mixing system on request.
See ink shade card on page 7.

Standard ink shades

The 23 standard ink shades (of standard and special inks) available from the TAMPOPRINT® AG warehouse in Germany are premixed ink shades which already cover a number of applications.
This area also includes European ink shades for screened 4-colour printing (CMYK) (exception: ink types C and E) as well as gold and silver.
The coverage of the ink types and shades also depends on the material to be printed and the engraving depth, cliché screening and the number of prints (individual or double print/multicolour print).
For application characteristics of the ink types see pages 10-45.
See ink shade card on page 6.

Special ink shades from our ink laboratory

Special inks service: The desired ink shade is manufactured in our ink laboratory according to your ink samples or specifications.
According to the ink shade systems:
RAL, PMS, NCS,
HKS K (gloss), HKS (N) (matt)
All ink types of our pad printing inks product range.

All TAMPOPRINT® solvent-based inks are available in 1-l containers.
Depending on the specific weight differences of the respective ink types, a 1-l container may weigh between 1.2 – 2.0 kg!

TAMPOPRINT® UV tampon printing inks as well as the LC and RDF tampon printing inks are available in 1-kg containers. The specific weight differences of the individual ink types may mean that the containers are not completely full.

Determining the parts/order number

To determine the parts number, please add the two-digit number of the respective ink type to the parts number and state the complete number in the order.

Example: 10 09 XX
- 10 09 — Ink type
- XX — Ink shade according to ink shade card

01	schwarz black noir negro		11	bordeaux rot bordeaux red bordeaux burdeos		21	brillant grün green brillant vert brillant verde brillante	
02	weiß white blanc blanco		12	rosa pink rose rosa		22	braun hell brown light brun clair marrón claro	
03	zitronengelb citron yellow jaune citron amarillo limón		13	blau hell blue light bleu clair azul claro		23	braun dunkel brown dark brun foncé marrón oscuro	
04	gelb mittel yellow medium jaune moyen amarillo medio		14	blau mittel blue medium bleu moyen azul medio				
05	gelb dunkel yellow dark jaune foncé amarillo oscuro		15	blau ultra blue ultra bleu ultra azul ultra		51	silber silver argent plata	
06	orange orange orange naranja		16	blau dunkel blue dark bleu foncé azul oscuro		52	gold gold or ore	
07	gelb ocker ochre yellow jaune ocre amarillo ocre		17	türkis turquoise turquoise turquesa				
08	rot hell red light rouge clair rojo claro		18	violett violet violet violeta				
09	signalrot red bright rouge vif rojo vivo		19	grün hell green light vert clair verde claro				
10	karminrot carmine rouge carmin rojo carmin		20	tannengrün green fir vert sapin verde pino				

European ink shades

CMYK inks for the photo-realistic presentation

80	yellow Europaton lasierend process yellow Europe shade yellow (jaune) Europe effet lasuré Impresión tramada yellow amarillo transparente
81	magente Europaton lasierend process magenta Europe shade magenta Europe effet lasuré Impresión tramada magenta rojo transparente ore
82	cyan Europaton lasierend Process cyan Europe shade cyan Europe effet lasuré Impresión tramada ciano azul transparente

Note: The ink shades shown here do not correspond to the actual appearance of the individual ink types and may only serve as an indicator.

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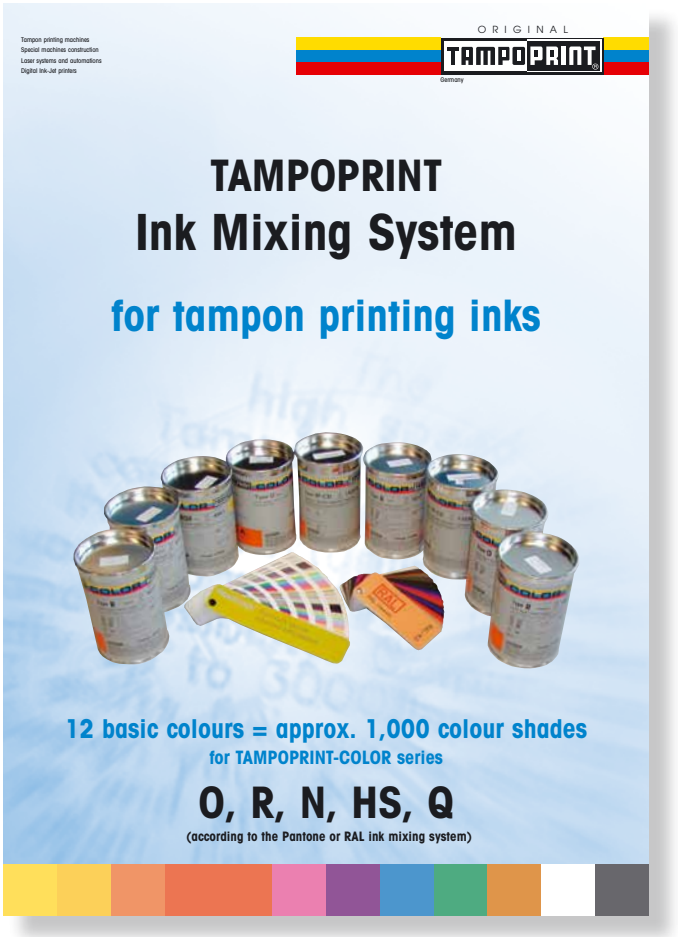
Determining the parts/order number

To determine the parts number, please add the two-digit number of the respective ink type to the parts number and state the complete number in the order.

Example: 10 09 XX
- 10 09 → Ink type
- XX → Ink shade according to ink shade card

61	zitronengelb citron yellow jaune citron amarillo limón		**71**	weiß white blanc blanco	
62	gelb yellow jaune amarillo		**72**	schwarz black noir negro	
63	orange orange orange naranja				
64	rot hell red light rouge clair rojo claro				
65	rot red rouge rojo				
66	rosa pink rose rosa				
67	violett violet violet violeta				
68	blau blue bleu azul				
69	grün green vert verde				
70	braun hell brown light brun clair marrón claro				



Note: The ink shades shown here do not correspond to the actual appearance of the individual ink types and may only serve as an indicator.

Regarding the major variations in chemical structure and the manufacturing method of the materials to be printed, in principle a suitability test (test print) is to be carried out. Antistatic additives, separating agents and lubricants may have a negative effect on the ink adhesion.

Material to be printed	B	B/GL	C	E	F	G	H	HS	K	L	M	N	O	P	Q	R	S	W	LC	GU	GU-N	TH	TP-CD	TP-PP	RDF	UV-RDF	LOGO
Components	2-C	2-C	1-C	1-C	1-C	1-C	1-C	1-C 2-C	1-C 2-C	2-C	2-C	2-C	1-C	1-C 2-C	1-C 2-C	1-C 2-C	2-C	2-C	1-C 2-C	1-C 2-C	1-C 2-C	1-C	1-C 2-C	1-C	1-C 2-C		2-C
ABS							•	•	•	•	•	•	•		•	•	•	•	•							•	•
Acrylic glass							•	•	•		•	•	•		•	•			•								•
Aluminium											•	•					•										
Aluminium, anodised		•			•						•	•	•														
Cellulose acetate	•										•	•	•														
Thermosetting plastics	•	•	•					•		•	•	•			•			•	•				•		•		
Elastomers																				•	•						
Glass		•	•								•	•										•					
Rubber																				•	•						
Epoxy resins																											•
Rigid PVC				•	•	•	•	•	•		•	•	•	•	•	•		•	•							•	
HDPE, LDPE (x3)	x3							x3			x3	x3		x3	x3	x3		x3							x3	x3	
Wood				•			•	•	•		•	•	•	•	•	•			•								
Ceramic		•										•										•					
Leather						•							•							•	•						
Lexan												•	•														
Makrolon (PC)				•			•	•	•				•		•	•			•								
Metal	•	•	•		•			•		•	•	•			•		•	•				•	•				
Non-ferrous metal		•						•		•	•	•			•			•					•				
Noryl	•							•			•	•	•		•			•	•								
Novodur (SAN)								•					•						•								
Lacquered surface	•		•	•	•			•	•	•	•	•	•	•		•		•	•				•		•	•	
Powder coated surface	•							•								•			•				•				
Chrome/nickel/gold/ rhodium-plated surface		•									•											•					
Paper				•		•	•	•	•				•	•	•	•			•								
PETP = PET = HS								•	•		•	•			•				•							•	
Polyacetate (x1)	x1							x1				x1		x1	x1	x1			x1								
Polyamide	•							•	•	•	•	•			•	•		•	•								
Polyethylene (x3)	x3							x3	x3	x3	x3	x3		x3		x3		x3	x3				x3		x3	x3	
Polycarbonate				•		•	•	•	•		•	•	•	•	•	•		•	•								
Polyester			•					•		•	•	•	•	•	•	•		•	•								
Polymethacrylate						•		•					•		•			•	•								
Polymethylmethacrylate											•	•		•		•											
Polypropylene (x3)	x3							x3	x3	x3	x3	x3	x3	x3	x3	x3	x3	x3	x3				x3	. •	x3	x3	
Polystyrene				•		•	•	•	•		•	•	•	•	•	•		•	•							•	
Polyurethane								•			•	•		•	•	•		•	•		•						
Heat-resistant moulding material																						•					
Powder coatings	•							•			•	•	•		•				•								
PV																				•							
SAN	•							•	•		•	•	•		•				•								
Soft lacquers																				•	•		b		b		
Textiles								•			•	•	•		•				•		•						
Thermoplastics TPE																				•	•						•
UV lacquer																							•		•		
Soft PVC							•		•				•							•	•					•	

x1 = only with thermal aftertreatment approx. 130° C (with gas flame or oven)
x2 = without pretreatment with 10% PP or PPO coupling agent
x3 = only with pretreatment
1-C = 1-component ink
2-C = 2-component ink

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Overview of the characteristics of the ink film with selection of the ink type, taking into account the material. The table gives information on the mechanical load capacity, the optical appearance as well as information on additional processing options of the ink film.

Characteristic	B	B/GL	C	E	F	G	H	HS	K	L	M	N	O	P	Q	R	S	W	LC	GU	GU-N	TH	TP-CD	TP-PP	RDF	UV-RDF	LOGO
Impact resistant										•															•	•	•
Can be inscribed				•			•																				
Block resistant							•	•	•	•	•	•	•	•	•	•			•						•	•	
Permanently elastic							•	•	•		•	•	•		•		•		•	•	•					•	•
Gloss ink	•		•		•	•		•	•	•	•	•	•	•	•	•	•	•	•			•	•	•	•	•	•
Good coverage	•	•		•		•	•	•	•		•	•	•			•	•		•			•		•	•	•	•
Suitable for food wrappings (exterior)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•					•	•	•	
Air drying	•	•		•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•		•
Matt ink	S			•	S		•	S		S	S	S	S	S	S	S							S				
Oven drying	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•		•
Suitable for screen printing	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•							•	•
Abrasion resistant		•					•	•	•	•	•	•	•			2-C	•		•						•	•	•
Cutting/punching resistant							•		•				•														
Satin-finish ink		•			•															•	•						
Stackable							•	•	•				•						•						•	•	
Can be deep drawn					•		•		•				•							•	•						
Slow drying	•	•								•	•	•															•
Quick drying				•	•	•	•	•	•				•			•	•		•	•	•		•		•		
Flow (good)	•	•		•	•		•	•	•	•	•	•	•	•	•	•	•	•	•						•	•	•
Can be bonded				b	•		•		•				•														
Mechanical resistance	•	•	•				•		•	•	•	•	•	•	•	•	•	•				•		•	b	•	•

Data regarding the resistances of an ink type on a suitable material.
The table describes the resistance of an ink type when exposed to one of the agents listed (e.g. light).

Resistance	B	B/GL	C	E	F	G	H	HS	K	L	M	N	O	P	Q	R	S	W	LC	GU	GU-N	TH	TP-CD	TP PP	RDF	UV-RDF	LOGO
Alcohol	•	•	•	•		b	b	2-C	•	•	•	•	•	2-C	b	2-C	•	•	2-C	2-C	2-C		b 2-C		2-C	•	
Cleaning agent containing alcohol	•	•	•	•		b	b	2-C	•	•	•	•	•	2-C	b	2-C	•	•	2-C	2-C	2-C		b 2-C	b	2-C	•	
Chemicals	b	b	•	b	•	b	b	2-C	•	•	•	•	b	b	•	•	•	•	2-C	•	•	•	b	•	2-C	•	•
Hand perspiration	•	•	•				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•		•	•	•
Light						b	b	•	b	•	b	b	•			b	•		b	b	•		•	•	b	•	•
Organic solvent	•	•	•	b			b	•	•	•	•	•	b		•	•		•					b				
Oils and fats	•	•	•					•	•	•	•	•	•	•	•	b 2-C	b 2-C	•	2-C	•	•	•	•	b	2-C	•	
Diluted alkalis	•	•	•					•	•	•	•	•	b	•	•	•	•	•	b	b	b	b			2-C	•	b
Diluted acids	b	•						2-C	b 2-C	•	•	•	b	b		2-C	•	•	b	b	b	•			b	•	
Water	•	•	•	•		•		b	b	•	•	•	•	2-C			•	•	b	2-C	2-C		•	b	b	•	•
Weather						b			b	•	b	b	•				•			•	•	•	•	•		•	•

S = possible as special ink
b = limited

= Special inks from pages 46 - 63

ORIGINAL TAMPOPRINT COLOR

Application data sheet

B-NT 2-component ink, gloss ink Available as matt ink on request.

Applications:	Used in "open" and "hermetic" tampon printing systems. Popular in the automotive industry on PA, PP, PE materials.
Materials to be printed:	Cellusose acetate, thermosetting plastics, metal, Noryl, powder-coated and lacquered surfaces, polyamide, polyacetate aftertreated with heat, pretreated polyethylene and polypropylene, SAN.
Characteristics:	Good coverage, suitable for food wrappings (exterior), air drying, oven drying, suitable for screen printing, slow drying, good flow, excellent mechanical resistance.
Resistance:	Chemicals (limited), hand perspiration, organic solvents, oils and fats, diluted alkalis, diluted acids (limited), water. The mechanical and chemical resistance is only achieved after the ink has fully hardened.
Pretreatment:	All polyolefines, polyethylene, polypropylene
Additives:	VD thinner slow-drying VD 3 thinner quick-drying VZ retarder BH hardener
Drying:	After the BH hardener is added, chemical-physical drying. At room temperature (20-25° C) approx. 10-15 min., hand and touch-dry. With thermal influence / air circulation approx. 1 min., with thermal diffusion for a few seconds. Oven drying: Time and temperature dependent on the materials to be printed (guide value: 80° C +/- 20 min. depending on ink layer thickness).
Curing:	At room temperature (20-25° C) approx. 5-6 days.
Storing:	Suitable for 1 year's storage, BH hardener approx. 1-2 years in sealed original container when stored in cool and dry location.
Printing consistency:	4 parts ink B : 1 part BH hardener. Ink ready for printing – add 10-20% VD or VD 3 thinner. Retarder – only use VZ retarder. Pot life of the mixed ink approx. 8 hours, after this you may have to deal with reduced adhesion and resistance even if the ink still appears fluid and ready for use.
Typographical information:	When processing, cans containing BH hardener must be tightly sealed immediately after removal.
Ability to overprint:	Within 24 hours.
Note:	The high mechanical and chemical resistance is only achieved after complete curing of the ink.
Risk information:	■ In accordance with Directive 91/155/EEC, the "safety data sheet" contains the designation for hazardous material VO and information about protective measures to be taken with regard to processing, storage and waste disposal. The ink shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.
Cleaning:	Our RM cleaning agent is suitable for cleaning the tools and clichés. Use our tampon cleaner to clean the tampons.

A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

Application technology:

If you have any further print and application-related queries, our application technology team will be happy to help.

E-mail: application@tampoprint.de, Fax: +49 7150 928-400

For your request

B-NT FAX +49 7150 928-433

Our range						Your requirements	
Parts no.			**Standard ink shade**	**Container**	**Contents**	**Unit**	**Ink shade**
10	02	01** - 23**	Standard ink shades	1 litre			
10	02	50	Bronze binder	1 litre			
10	02	51	Black matt	1 litre			
10	02	52	White matt	1 litre			
10	02	57	Ochre yellow matt	1 litre			
10	02	51	Silver	1 litre			
10	02	52	Gold	1 litre			
10	02	80	Process yellow Europe shade	1 litre			
10	02	81	Process magenta Europe shade	1 litre			
10	02	82	Process cyan Europe shade	1 litre	Density 1.2 – 2.0 kg!		
Other ink shades on request							
10	02	83	Transparent paste	1 litre			
Parts no.			**Thinner**	**Container**	**kg**		
12	01	01	VD	1 litre	approx. 1 kg		
12	91	01	VD	5 litres	approx. 5 kg		
12	01	04	VD 3	1 litre	approx. 1 kg		
Parts no.			**Retarder**	**Container**	**kg**		
12	02	01	VZ	1 litre	approx. 1 kg		
Parts no.			**Hardener**	**Container**	**kg**		
12	02	99	BH	0.2 litre	approx. 0.2 kg		
12	53	01	BH	0.5 litre	approx. 0.5 kg		
12	03	01	BH	1 litre	approx. 1 kg		
Parts no.			**Cleaning agent**	**Container**	**kg**		
12	04	01	RM	1 litre	approx. 1 kg		
12	94	01	RM	30 litres	approx. 30 kg		
Parts no.			**Tampon cleaner**	**Container**	**kg**		
12	04	04	Tampon cleaner	1 litre	approx. 1 kg		
12	94	05	Tampon cleaner	5 litres	approx. 5 kg		

Contact us:
Sales Tampon printing ink.
E-Mail:colour@tampoprint.de, Fax: +49 7150 928-433
under: http://www.tampoprint.de (Enquiry form)

** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

Application data sheet

B/GL-NT 2-component ink, satin finish

Applications:	Special applications: Bottles, drinking glasses and glass in general, sanitary ware industry, e.g. armatures.
Materials to be printed:	Aluminium anodised, thermosetting plastics, glass, ceramic, metal, non-ferrous metal, chrome/nickel/gold/rhodium plated.
Characteristics:	Good coverage, slow drying, suitable for food wrappings (exterior), air drying, oven drying, suitable for screen printing, abrasion-resistant, good flow, good mechanical resistance.
Resistance:	Against: Diluted alkalis, alcohol, cleaning agents containing alcohol, chemicals (limited), hand perspiration, organic solvents, oils and fats, diluted acids, water.
Pretreatment:	-
Thinner / retarder / hardener / additive:	VD thinner slow-drying VD 3 thinner quick-drying BH/GL hardener (for higher solvent resistance), BH//GL-02 hardener (for higher water resistance) VL levelling agent
Drying:	After the BH/GL hardener is added, chemical-physical drying. With BH/GL hardener, better results are achieved only after oven drying at 140ºC for 20 minutes. At room temperature (20-25° C) approx. 10-15 min., with thermal influence / air circulation approx. 40-60 sec., max. resistance is achieved by oven drying at 140ºC for approx. 20 min.
Curing:	At room temperature (20-25° C) approx. 5-6 days.
Storing:	Suitable for 1 year's storage. BH/GL hardener approx. 1-2 years in sealed original container when stored in cool and dry location.
Printing consistency:	20 parts B/GL ink : 1 part BH/GL or BH/GL-02 hardener Ink ready for printing = add 10-20% VD or VD 3 thinner. Pot life of the mixed ink approx. 8 hours, after this you may have to deal with reduced adhesion and resistance even if the ink still appears fluid and ready for use.
Typographical information:	If there is disruption to the flow, use VL levelling agent (max. 10%). When processing, cans containing BH/GL hardener must be tightly sealed immediately after removal.
Ability to overprint:	Within 24 hours.
Note:	The high mechanical and chemical resistance is only achieved after complete curing of the ink or after oven drying.
Risk information:	■ In accordance with Directive 91/155/EEC, the "safety data sheet" contains the designation for hazardous material VO and information about protective measures to be taken with regard to processing, storage and waste disposal. The ink shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.
Cleaning:	Our RM cleaning agent is suitable for cleaning the tools and clichés. Use tampon cleaner to clean the tampons.

A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

Application technology:

If you have any further print and application-related queries, our application technology team will be happy to help.

E-mail: application@tampoprint.de, Fax: +49 7150 928-400

For your request

B/GL-NT FAX +49 7150 928-433

Our range						Your requirements	
Parts no.			**Standard ink shade**	**Container**	**Contents**	**Unit**	**Ink shade**
10	23	01** - 23**	Standard ink shades	1 litre	Density 1.2 – 2.0 kg!		
10	23	50	Bronze binder	1 litre			
10	23	51	Silver	1 litre			
10	23	52	Gold	1 litre			
10	23	80	Process yellow Europe shade	1 litre			
10	23	81	Process magenta Europe shade	1 litre			
10	23	82	Process cyan Europe shade	1 litre			
Other ink shades on request							
Parts no.			**Thinner**	**Container**	**kg**		
12	01	01	VD	1 litre	approx. 1 kg		
12	91	01	VD	5 litres	approx. 5 kg		
12	01	04	VD 3	1 litre	approx. 1 kg		
Parts no.			**Hardener**	**Container**	**kg**		
12	23	00	BH / GL-02	0.2 litre	approx. 0.2 kg		
12	53	00	BH / GL-02	0.5 litre	approx. 0.5 kg		
12	03	00	BH / GL-02	1 litre	approx. 1 kg		
12	53	05	BH / GL	0.5 litre	approx. 0.5 kg		
12	03	05	BH / GL	1 litre	approx. 1 kg		
Parts no.			**Levelling agent**	**Container**	**kg**		
12	05	01	VL	1 litre	approx. 1 kg		
Parts no.			**Cleaning agent**	**Container**	**kg**		
12	04	01	RM	1 litre	approx. 1 kg		
12	94	01	RM	30 litres	approx. 30 kg		
Parts no.			**Tampon cleaner**	**Container**	**kg**		
12	04	04	Tampon cleaner	1 litre	approx. 1 kg		
12	04	05	Tampon cleaner	5 litres	approx. 5 kg		

Contact us:
Sales Tampon printing ink.
E-Mail:colour@tampoprint.de, Fax: +49 7150 928-433
under: http://www.tampoprint.de (Enquiry form)

** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

Application data sheet

C-NT 1-component ink - Stoving ink, gloss ink

Applications:	Preferred choice for metals.
Materials to be printed:	Thermosetting plastics, glass, metal, lacquered surfaces, polyester.
Characteristics:	C ink must be oven dried. Suitable for food wrappings (exterior), very high mechanical resistance.
Resistance:	Against: Alcohol, cleaning agents containing alcohol, chemicals, hand perspiration, organic solvents, oils and fats, diluted alkalis, water.
Pretreatment:	-
Thinner / retarder / hardener / additive:	VD thinner slow-drying VD 3 thinner quick-drying VZ retarder
Drying:	C inks require particular temperatures and drying times for curing: at 120ºC approx. 30-40 min., at 140ºC approx. 20-30 min., at 160ºC approx. 15-20 min., at 180ºC approx. 10-15 min. No yellowing occurs at the specified times and temperatures.
Curing:	Stoving ink
Storing:	At room temperature (20-25° C) approx. 1 year in sealed original container when stored in cool and dry location.
Printing consistency:	Ink ready for printing – add 15-30% VD or VD 3 thinner. Retarder – only use VZ retarder.
Typographical information:	-
Ability to overprint:	-
Note:	Special versions have been developed for printing products in the semi-conductor industry (ICS).
Risk information:	■ In accordance with Directive 91/155/EEC, the "safety data sheet" contains the designation for hazardous material VO and information about protective measures to be taken with regard to processing, storage and waste disposal. The ink shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.
Cleaning:	Our RM cleaning agent is suitable for cleaning the tools and clichés. Use tampon cleaner to clean the tampons.

A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

Application technology:

If you have any further print and application-related queries, our application technology team will be happy to help.

E-mail: application@tampoprint.de, Fax: +49 7150 928-400

For your request

C-NT

FAX +49 7150 928-433

Our range						Your requirements	
Parts no.			**Standard ink shade**	**Container**	**Contents**	**Unit**	**Ink shade**
10	03	01** - 04**	Standard ink shades	1 litre	Density 1.2 – 2.0 kg!		
10	03	06**	Standard ink shade	1 litre			
10	03	08** - 11**	Standard ink shades	1 litre			
10	03	13** - 15**	Standard ink shades	1 litre			
10	03	17**	Standard ink shade	1 litre			
10	03	19**	Standard ink shade	1 litre			
10	03	22**	Standard ink shade	1 litre			
Other ink shades on request							
10	03	50	Bronze binder	1 litre			
Parts no.			**Thinner**	**Container**	**kg**		
12	01	01	VD	1 litre	approx. 1 kg		
12	91	01	VD	5 litres	approx. 5 kg		
12	01	04	VD 3	1 litre	approx. 1 kg		
Parts no.			**Retarder**	**Container**	**kg**		
12	02	01	VZ	1 litre	approx. 1 kg		
Parts no.			**Cleaning agent**	**Container**	**kg**		
12	04	01	RM	1 litre	approx. 1 kg		
12	94	01	RM	30 litres	approx. 30 kg		
Parts no.			**Tampon cleaner**	**Container**	**kg**		
12	04	04	Tampon cleaner	1 litre	approx. 1 kg		
12	94	05	Tampon cleaner	5 litres	approx. 5 kg		

Contact us:
Sales Tampon printing ink.
E-Mail:colour@tampoprint.de, Fax: +49 7150 928-433
under: http://www.tampoprint.de (Enquiry form)

** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

E

Application data sheet

E-NT 1-component ink, matt ink

Applications:	Excellent for inscribing, e.g. with pencil, ink, etc.
Materials to be printed:	For all kinds of thermoplastics with the exception of polyolefines. Rigid PVC, wood, Makrolon, paper, polycarbonate, polystyrene.
Characteristics:	Can be inscribed, good coverage, suitable for food wrappings (exterior), air drying, matt ink, oven drying, suitable for screen printing, quick drying, good flow. Limited: Can be bonded.
Resistance:	Against: Cleaning agents containing alcohol, alcohol, water. Limited: Organic solvents, chemicals.
Pretreatment:	-
Thinner / retarder / hardener / additive:	VD thinner slow-drying VD 3 thinner quick-drying VZ retarder
Drying:	Very quick physical drying. At room temperature (20-25° C) approx. 1-3 min., with thermal influence / air circulation approx. 10-20 sec.
Curing:	Room temperature 24 hours. Oven drying: Time and temperature dependent on the materials to be printed (guide value: 80° C +/- 20 min. depending on ink layer thickness).
Storing:	At room temperature (20-25° C) approx. 1 year in sealed original container when stored in cool and dry location.
Printing consistency:	Ink ready for printing – add 10-20% VD or VD 3 thinner. Retarder – only use VZ retarder.
Typographical information:	-
Ability to overprint:	Yes
Note:	-
Risk information:	■ In accordance with Directive 91/155/EEC, the "safety data sheet" contains the designation for hazardous material VO and information about protective measures to be taken with regard to processing, storage and waste disposal. The ink shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.
Cleaning:	Our RM cleaning agent is suitable for cleaning the tools and clichés. Use tampon cleaner to clean the tampons.

A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

Application technology:

If you have any further print and application-related queries, our application technology team will be happy to help.

E-mail: application@tampoprint.de, Fax: +49 7150 928-400

For your request

E-NT

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Our range						Your requirements	
Parts no.			**Standard ink shade**	**Container**	**Contents**	**Unit**	**Ink shade**
10	05	01** - 10**	Standard ink shades	1 litre	Density 1:2 – 2.0 kg!		
10	05	12** - 18**	Standard ink shades	1 litre			
10	05	20**	Standard ink shade	1 litre			
10	05	22** - 23**	Standard ink shades	1 litre			
Other ink shades on request							
10	05	50	Bronze binder	1 litre			
Parts no.			Thinner	Container	kg		
12	01	01	VD	1 litre	approx. 1 kg		
12	91	01	VD	5 litres	approx. 5 kg		
12	01	04	VD 3	1 litre	approx. 1 kg		
Parts no.			**Retarder**	**Container**	**kg**		
12	02	01	VZ	1 litre	approx. 1 kg		
Parts no.			**Cleaning agent**	**Container**	**kg**		
12	04	01	RM	1 litre	approx. 1 kg		
12	94	01	RM	30 litres	approx. 30 kg		
Parts no.			**Tampon cleaner**	**Container**	**kg**		
12	04	04	Tampon cleaner	1 litre	approx. 1 kg		
12	04	05	Tampon cleaner	5 litres	approx. 5 kg		

Contact us:
Sales Tampon printing ink.
E-Mail:colour@tampoprint.de, Fax: +49 7150 928-433
under: http://www.tampoprint.de (Enquiry form)

** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

Application data sheet

F

F-NT 1-component ink, satin finish

Applications:	Printing on metals where the requirements of 2-component inks are not significant.
Materials to be printed:	Aluminium anodised, rigid PVC, metal, lacquered surfaces.
Characteristics:	Suitable for food wrappings (exterior), air drying, oven drying, can be deep drawn, quick drying, dispersion (good), can be bonded.
Resistance:	Against: Chemicals
Pretreatment:	-
Thinner / retarder / hardener / additive:	VD 2 thinner VZ 3 retarder
Drying:	Very quick physical drawing, thermal shock drying 10-20 seconds. Wipe-dry and touch-dry in 1-2 minutes.
Curing:	At room temperature (20-25° C). Oven drying: Time and temperature dependent on the materials to be printed (guide value: 80° C +/- 20 min. depending on ink layer thickness).
Storing:	At room temperature (20-25° C) approx. 1 year in sealed original container when stored in cool and dry location.
Printing consistency:	Ink ready for printing – add 10-20% VD 2 thinner. Retarder – only use VZ 3 retarder.
Typographical information:	-
Ability to overprint:	Yes
Note:	The high mechanical and chemical resistance is only achieved after complete curing of the ink.
Risk information:	■ In accordance with Directive 91/155/EEC, the "safety data sheet" contains the designation for hazardous material VO and information about protective measures to be taken with regard to processing, storage and waste disposal. The ink shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.
Cleaning:	Our RM cleaning agent is suitable for cleaning the tools and clichés. Use tampon cleaner to clean the tampons.

A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

Application technology:

If you have any further print and application-related queries, our application technology team will be happy to help.

E-mail: application@tampoprint.de, Fax: +49 7150 928-400

For your request

F-NT

FAX +49 7150 928-433

Our range

Parts no.			Standard ink shade	Container	Contents
10	06	01** - 23**	Standard ink shades	1 litre	Density 1.2 – 2.0 kg!
10	06	50	Bronze binder	1 litre	
10	06	51	Silver	1 litre	
10	06	52	Gold	1 litre	
10	06	80	Process yellow Europe shade	1 litre	
10	06	81	Process magenta Europe shade	1 litre	
10	06	82	Process cyan Europe shade	1 litre	
Other ink shades on request					
Parts no.			**Thinner**	**Container**	**kg**
12	01	02	VD 2	1 litre	approx. 1 kg
12	91	02	VD 2	5 litres	approx. 5 kg
Parts no.			**Retarder**	**Container**	**kg**
12	02	03	VZ 3	1 litre	approx. 1 kg
Parts no.			**Cleaning agent**	**Container**	**kg**
12	04	01	RM	1 litre	approx. 1 kg
12	94	01	RM	30 litres	approx. 30 kg
Parts no.			**Tampon cleaner**	**Container**	**kg**
12	04	04	Tampon cleaner	1 litre	approx. 1 kg
12	04	05	Tampon cleaner	5 litres	approx. 5 kg

Your requirements

Unit	Ink shade

Contact us:
Sales Tampon printing ink.
E-Mail:colour@tampoprint.de, Fax: +49 7150 928-433
under: http://www.tampoprint.de (Enquiry form)

** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

Application data sheet

G-NT 1-component ink, gloss ink

G

Applications:	Particularly suitable for thin-walled polystyrene, polycarbonate.
Materials to be printed:	Rigid PVC, leather, paper, polycarbonate, polymethacrylate, polystyrene.
Characteristics:	Good coverage, suitable for food wrappings, air drying, oven drying, suitable for screen printing, quick drying.
Resistance:	Against: Water. Limited: Chemicals, alcohol, cleaning agents containing alcohol, light resistant, weather-proof.
Pretreatment:	-
Thinner / retarder / hardener / additive:	VD thinner slow-drying VD 3 thinner quick-drying VZ retarder
Drying:	Physical at the beginning, i. e. by evaporation of solvent, thorough drying is the result of oxidation, i.e. absorption of oxygen. At room temperature (20-25° C) approx. 1-3 min., with thermal influence / air circulation approx. 20-30 sec.
Curing:	Air drying at room temperature 20-25° C approx. 1-2 hours, at 80° C approx. 10 minutes. Oven drying: Time and temperature dependent on the materials to be printed (guide value: 80° C +/- 20 min. depending on ink layer thickness).
Storing:	1 year. A skin may form in cans which have been opened and stored for a longer period, this must not be mixed into the ink. To prevent the formation of a skin, it is recommended that opened cans are sealed tightly after use.
Printing consistency:	Ink ready for printing – add 10-30% VD or VD 3 thinner. Retarder – only use VZ retarder.
Typographical information:	-
Ability to overprint:	Yes
Note:	-
Risk information:	■ In accordance with Directive 91/155/EEC, the "safety data sheet" contains the designation for hazardous material VO and information about protective measures to be taken with regard to processing, storage and waste disposal. The ink shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.
Cleaning:	Our RM cleaning agent is suitable for cleaning the tools and clichés. Use tampon cleaner to clean the tampons.

A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

Application technology:

If you have any further print and application-related queries, our application technology team will be happy to help.

E-mail: application@tampoprint.de, Fax: +49 7150 928-400

For your request

G-NT

FAX +49 7150 928-433

Our range						Your requirements	
Parts no.			**Standard ink shade**	**Container**	**Contents**	**Unit**	**Ink shade**
10	07	01** - 23**	Standard ink shades	1 litre	Density 1.2 – 2.0 kg!		
10	07	50	Bronze binder	1 litre			
10	07	51	Black matt	1 litre			
10	07	52	White matt	1 litre			
10	07	80	Process yellow Europe shade	1 litre			
10	07	81	Process magenta Europe shade	1 litre			
10	07	82	Process cyan Europe shade	1 litre			
Other ink shades on request							
10	07	83	Transparent paste	1 litre			
Parts no.			**Thinner**	**Container**	**kg**		
12	01	01	VD	1 litre	approx. 1 kg		
12	91	01	VD	5 litres	approx. 5 kg		
12	01	04	VD 3	1 litre	approx. 1 kg		
Parts no.			**Retarder**	**Container**	**kg**		
12	02	01	VZ	1 litre	approx. 1 kg		
Parts no.			**Cleaning agent**	**Container**	**kg**		
12	04	01	RM	1 litre	approx. 1 kg		
12	94	01	RM	30 litres	approx. 30 kg		
Parts no.			**Tampon cleaner**	**Container**	**kg**		
12	04	04	Tampon cleaner	1 litre	approx. 1 kg		
12	04	05	Tampon cleaner	5 litres	approx. 5 kg		

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under: http://www.tampoprint.de (Enquiry form)

** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

Application data sheet

H-NT 1-component ink, matt ink

Applications:	Used very frequently by customers in the medical industry. For example, blood plasma bags, as it can be inscribed.
Materials to be printed:	ABS, acrylic glass, rigid PVC, wood, Makrolon, paper, polycarbonate, polystyrene, SAN, soft PVC.
Characteristics:	Can be inscribed, block resistant, permanently elastic, good coverage, suitable for food wrappings (exterior), air drying, oven drying, suitable for screen printing, abrasion-resistant, cutting/punching resistant, quick drying, stackable, can be deep drawn, good flow, can be bonded, mechanical resistance.
Resistance:	Against: Hand perspiration. Limited: Alcohol, chemicals, light, org. solvents, cleaning agents containing alcohol, weather.
Pretreatment:	-
Thinner / retarder / hardener / additive:	VD 2 thinner VZ 380 retarder
Drying:	Very quick physical drying. Air drying (20° C) approx. 10-15 min., thermal shock drying approx. 20-30 sec., wipe-dry and touch-dry in approx. 1 min. Oven drying: Time and temperature dependent on the materials to be printed (guide value: 80° C +/- 20 min. depending on ink layer thickness).
Curing:	Room temperature 24 hours.
Storing:	At room temperature (20-25° C) approx. 1 year in sealed original container when stored in cool and dry location.
Printing consistency:	Ink ready for printing – add 10-20% VD 2 thinner. Retarder – only use VZ 380 retarder.
Typographical information:	-
Ability to overprint:	Yes
Note:	-
Risk information:	■ In accordance with Directive 91/155/EEC, the "safety data sheet" contains the designation for hazardous material VO and information about protective measures to be taken with regard to processing, storage and waste disposal. The ink shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.
Cleaning:	Our RM cleaning agent is suitable for cleaning the tools and clichés. Use tampon cleaner to clean the tampons.

A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

Application technology:

If you have any further print and application-related queries, our application technology team will be happy to help.

E-mail: application@tampoprint.de, Fax: +49 7150 928-400

For your request

H-NT

FAX +49 7150 928-433

Our range						Your requirements	
Parts no.			**Standard ink shade**	**Container**	**Contents**	**Unit**	**Ink shade**
10	08	01** - 23**	Standard ink shades	1 litre	Density 1.2 – 2.0 kg!		
10	08	50	Bronze binder	1 litre			
10	08	51	Silver paste	1 litre			
10	08	52	Gold paste	1 litre			
10	08	80	Process yellow Europe shade	1 litre			
10	08	81	Process magenta Europe shade	1 litre			
10	08	82	Process cyan Europe shade	1 litre			
Other ink shades on request							
10	08	83	Transparent paste	1 litre			
Parts no.			**Thinner**	**Container**	**kg**		
12	01	02	VD 2	1 litre	approx. 1 kg		
12	91	02	VD 2	5 litres	approx. 5 kg		
Parts no.			**Retarder**	**Container**	**kg**		
12	02	06	VZ 380	1 litre	approx. 1 kg		
Parts no.			**Cleaning agent**	**Container**	**kg**		
12	04	01	RM	1 litre	approx. 1 kg		
12	94	01	RM	30 litres	approx. 30 kg		
Parts no.			**Tampon cleaner**	**Container**	**kg**		
12	04	04	Tampon cleaner	1 litre	approx. 1 kg		
12	04	05	Tampon cleaner	5 litres	approx. 5 kg		

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under: http://www.tampoprint.de (Enquiry form)

** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

Application data sheet

HS-NT 1- and 2-component ink, gloss ink

Applications:	Good for fast printing cycles - "hermetic" systems. A popular choice in the medical industry, for technical products (e.g. automotive industry), toy industry, textile industry (underwear).
Materials to be printed:	ABS, acrylic glass, thermosetting plastics, rigid PVC, HDPE and LDPE (pretreated), wood, Makrolon, metal, non-ferrous metal, Novodur (SAN), lacquered and powder-coated surfaces, paper, PETP, PET, polyacetate (thermal aftertreated), polyamide, polyethylene (pretreated), polycarbonate, polyester, polymethacrylate, polypropylene (pretreated), polystyrene, polyurethane, powder lacquers, SAN, textiles.
Characteristics:	Block resistant, permanently elastic, good coverage, suitable for food wrappings (exterior), air drying, oven drying, suitable for screen printing, abrasion resistant, stackable, flow (good).
Resistance:	Against: Diluted alkalis, hand perspiration, light, organic solvents, surfactants, oils and fats, water (limited), weather. As 2-component ink against: Alcohol, cleaning agents containing alcohol, chemicals, diluted acids.
Pretreatment:	All polyolefines
Thinner / retarder / hardener / additive:	VDS 1015 thinner quick-drying VDL 380 thinner slow-drying (particular benefit with ink shade "02") VDL 1015 thinner slow-drying LMN hardener LMN/1 hardener (where there is a high demand for UV and weather resistance)
Drying:	Physical drying, chemical cross-linking. With infrared drying approx. 1-2 sec., air drying (20°C) approx. 3 min., oven drying (70-80°C) approx. 1-2 min.
Curing:	1-component ink: 1 day, at room temperature (20-25° C). 2-component ink: 3 days, at room temperature (20-25° C).
Storing:	Approx. 1 year in sealed original container, when stored in cool and dry location.
Printing consistency:	5-10 parts HS ink : 1 part LMN or LMN 1 hardener. Ink ready for printing – add 10-20% VDS 1015 or VDL 1015 thinner. Pot life of the mixed ink at 20°C, depending on proportion of hardener: 5 : 1 approx. 12 Std., 10 : 1 approx. 24 Std.
Typographical information:	When exposed to greater mechanical and chemical loads or when a greater level of adhesion is required, HS inks can also be used as 2-component printing inks. When processing, cans containing LMN hardener must be tightly sealed immediately after removal.
Ability to overprint:	1-component ink yes, 2-component ink within 24 hours.
Note:	-
Risk information:	■ In accordance with Directive 91/155/EEC, the "safety data sheet" contains the designation for hazardous material VO and information about protective measures to be taken with regard to processing, storage and waste disposal. The ink shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.
Cleaning:	Our RM cleaning agent is suitable for cleaning the tools and clichés. Use tampon cleaner to clean the tampons.

A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

Application technology:

If you have any further print and application-related queries, our application technology team will be happy to help.

E-mail: application@tampoprint.de, Fax: +49 7150 928-400

For your request

HS-NT FAX +49 7150 928-433

Our range						Your requirements	
Parts no.			**Standard ink shade**	**Container**	**Contents**	**Unit**	**Ink shade**
13	26	01** - 23**	Standard ink shades	1 litre	Density 1.2 – 2.0 kg!		
13	26	50	Clear colour	1 litre			
13	26	51	Silver	1 litre			
13	26	52	Gold	1 litre			
13	26	53	Gold brilliant	1 litre			
13	26	80	Process yellow Europe shade	1 litre			
13	26	81	Process magenta Europe shade	1 litre			
13	26	82	Process cyan Europe shade	1 litre			
Other ink shades on request							
13	26	83	Transparent paste	1 litre			
Parts no.			**Thinner**	**Container**	**kg**		
12	01	05	VDL 380	1 litre	approx. 1 kg		
12	01	07	VDL 1015	1 litre	approx. 1 kg		
12	91	07	VDL 1015	5 litres	approx. 5 kg		
12	01	08	VDS 1015	1 litre	approx. 1 kg		
12	01	10	VDS 1015	5 litres	approx. 5 kg		
Parts no.			**Hardener**	**Container**	**kg**		
12	23	01	LMN	0.2 litre	approx. 0.2 kg		
12	55	07	LMN	0.5 litre	approx. 0.5 kg		
12	03	03	LMN	1 litre	approx. 1 kg		
12	53	02	LMN 1	0.5	approx. 0.5 kg		
12	03	02	LMN 1	1 litre	approx. 1 kg		
Parts no.			**Cleaning agent**	**Container**	**kg**		
12	04	01	RM	1 litre	approx. 1 kg		
12	94	01	RM	30 litres	approx. 30 kg		
Parts no.			**Tampon cleaner**	**Container**	**kg**		
12	04	04	Tampon cleaner	1 litre	approx. 1 kg		
12	04	05	Tampon cleaner	5 litres	approx. 5 kg		

HS

Contact us:
Sales Tampon printing ink.
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under: http://www.tampoprint.de (Enquiry form)

** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

Application data sheet

K-NT 1- and 2-component ink, gloss ink

(free of cyclohexanone and aromatic compounds)

Applications:	For rapid-running tampon printing machines up to 4,000 cycles/hour.
Materials to be printed:	ABS, acrylic glass, rigid PVC, wood, Makrolon, lacquered surfaces, paper, PET, polyamide, polyethylene (pretreated), polycarbonate, polypropylene (pretreated), polystyrene, SAN, soft PVC.
Characteristics:	Block resistant, permanently elastic, suitable for food wrappings (exterior), air drying, oven drying, suitable for screen printing, abrasion resistant, stackable, cutting/punching resistant, can be deep drawn, quick drying, flow (good), mechanical resistance.
Resistance:	Against: Alcohol, cleaning agents containing alcohol, chemicals, hand perspiration, organic solvents, oils and fats, diluted alkalis, diluted acids. Limited: Light, water, weather.
Pretreatment:	All polyolefines
Thinner / retarder / hardener / additive:	VDL-K thinner slow-drying VDS-K thinner quick-drying VZ-K retarder LMN-K hardener
Drying:	At room temperature (21° C) 30-35 sec. (hand and touch-dry). Physical drying, chemical cross-linking.
Curing:	1-component ink: 1 day, at room temperature (20-25° C). 2-component ink: 3 days, at room temperature (20-25° C). Oven drying: Time and temperature dependent on the materials to be printed (guide value: 80° C +/- 20 min. depending on ink layer thickness).
Storing:	Approx. 1 year in sealed original container, stored in cool and dry location.
Printing consistency:	14 parts K : 1 part LMN hardener Ink ready for printing – add 10-20% VDL-K or VDS-K thinner Pot life of the mixed ink at 20° C approx. 12-14 hours.
Typographical information:	When exposed to greater mechanical and chemical loads or when a greater level of adhesion is required, K inks can also be used as 2-component printing inks. When processing, cans containing LMN-K hardener must be tightly sealed immediately after removal.
Ability to overprint:	1-component yes, 2-component ink within 24 hours.
Note:	-
Risk information:	■ In accordance with Directive 91/155/EEC, the "safety data sheet" contains the designation for hazardous material VO and information about protective measures to be taken with regard to processing, storage and waste disposal. The ink shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.
Cleaning:	Our RM cleaning agent is suitable for cleaning the tools and clichés. Use tampon cleaner to clean the tampons.

A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

Application technology:

If you have any further print and application-related queries, our application technology team will be happy to help.

E-mail: application@tampoprint.de, Fax: +49 7150 928-400

For your request

K-NT FAX +49 7150 928-433

Our range						Your requirements	
Parts no.			**Standard ink shade**	**Container**	**Contents**	**Unit**	**Ink shade**
13	27	01** - 23**	Standard ink shades	1 litre	Density 1.2 – 2.0 kg!		
13	27	50	Clear colour	1 litre			
13	27	51	Silver	1 litre			
13	27	52	Gold	1 litre			
13	27	80	Process yellow Europe shade	1 litre			
13	27	81	Process magenta Europe shade	1 litre			
13	27	82	Process cyan Europe shade	1 litre			
Other ink shades on request							
Parts no.			**Thinner**	**Container**	**kg**		
12	01	11	VDL-K	1 litre	approx. 1 kg		
12	01	12	VDS-K	1 litre	approx. 1 kg		
Parts no.			**Retarder**	**Container**	**kg**		
12	02	08	VZ-K	1 litre	approx. 1 kg		
Parts no.			**Hardener**	**Container**	**kg**		
12	53	07	LMN-K	0.2 litre	approx. 0.2 kg		
Parts no.			**Cleaning agent**	**Container**	**kg**		
12	04	01	RM	1 litre	approx. 1 kg		
12	94	01	RM	30 litres	approx. 30 kg		
Parts no.			**Tampon cleaner**	**Container**	**kg**		
12	04	04	Tampon cleaner	1 litre	approx. 1 kg		
12	04	05	Tampon cleaner	5 litres	approx. 5 kg		

K

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Sales Tampon printing ink.
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under: http://www.tampoprint.de (Enquiry form)

** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

Application data sheet

L-NT 2-component ink, gloss ink

Applications:	Technical products with very high chemical load requirement (e.g. automotive industry).
Materials to be printed:	ABS, thermosetting plastics, metal, lacquered surfaces, polyamide, polyethylene (pretreated), polyester, polypropylene (pretreated).
Characteristics:	Impact resistant, block resistant, slow drying, suitable for food wrappings (exterior), air drying, suitable for screen printing, abrasion resistant, flow (good), mechanical resistance.
Resistance:	Against: Diluted alkalis, alcohol, chemicals, hand perspiration, light, organic solvents, oils and fats, diluted acids, water, weather. Not resistant against fillers containing phenols.
Pretreatment:	Polyolefines
Thinner / retarder / hardener / additive:	VDL 380 thinner slow-drying VDS 380 thinner quick-drying VZ 380 retarder LMN 1 hardener
Drying:	Chemical-reactive curing. Thermal shock 20-30 sec. Touch-dry approx. 2-3 min. Oven drying: Time and temperature dependent on the materials to be printed (guide value: 80° C +/- 20 min. depending on ink layer thickness).
Curing:	At room temperature (20-25° C) approx. 3-4 days.
Storing:	Approx. 1 year in sealed original container, stored in cool and dry location.
Printing consistency:	2 parts L ink : 1 part LMN 1 hardener. Ink ready for printing – add 10-20% VDS 380 or VDL 380 thinner. Retarder – only use VZ 380 retarder. `Pot life of the mixed ink at 20° C approx. 8 hours, after this you may have to deal with reduced adhesion and resistance even if the ink still appears fluid and ready for use.
Typographical information:	When processing, cans containing LMN 1 hardener must be tightly sealed immediately after removal.
Ability to overprint:	Reactively curing inks are almost free of solvents after curing. L inks can only be overprinted within the curing time of approx. 24 hours. The best multicolour prints with superimposed ink surfaces can be achieved when the printing units are connected in line with intermediate drying stations.
Note:	The high mechanical and chemical resistance is only achieved after complete curing of the ink.
Risk information:	■ In accordance with Directive 91/155/EEC, the "safety data sheet" contains the designation for hazardous material VO and information about protective measures to be taken with regard to processing, storage and waste disposal. The ink shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.
Cleaning:	Our RM cleaning agent is suitable for cleaning the tools and clichés. Use tampon cleaner to clean the tampons.

A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

Application technology:

If you have any further print and application-related queries, our application technology team will be happy to help.

E-mail: application@tampoprint.de, Fax: +49 7150 928-400

For your request

L-NT

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Our range

Parts no.			Standard ink shade	Container	Contents
10	11	01** - 23**	Standard ink shades	1 litre	Density 1.2 – 2.0 kg!
10	11	50	Clear colour	1 litre	
10	11	51	Silver	1 litre	
10	11	52	Gold	1 litre	
10	11	53	Clear colour matt, UV-resistant	1 litre	
Other ink shades on request					
Parts no.			**Thinner**	**Container**	**kg**
12	01	05	VDL 380	1 litre	approx. 1 kg
12	01	06	VDS 380	1 litre	approx. 1 kg
Parts no.			**Retarder**	**Container**	**kg**
12	02	06	VZ 380	1 litre	approx. 1 kg
Parts no.			**Hardener**	**Container**	**kg**
12	53	02	LMN 1	0.5	approx. 0.5 kg
12	03	02	LMN 1	1 litre	approx. 1 kg
Parts no.			**Cleaning agent**	**Container**	**kg**
12	04	01	RM	1 litre	approx. 1 kg
12	94	01	RM	30 litres	approx. 30 kg
Parts no.			**Tampon cleaner**	**Container**	**kg**
12	04	04	Tampon cleaner	1 litre	approx. 1 kg
12	04	05	Tampon cleaner	5 litres	approx. 5 kg

Your requirements

Unit	Ink shade

L

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** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

Application data sheet

M-NT 2-component ink, gloss ink

Applications:	Technical products, good adhesion on metal.
Materials to be printed:	ABS, acrylic glass, aluminium, aluminium anodised, cellulose acetate, thermosetting plastics, glass, rigid PVC, HDPE and LDPE (pretreated), wood, metal, non-ferrous metal, Noryl, surfaces (lacquered, chrome/gold/nickel/silver/rhodium-plated), PETP, PET, polyamide, polyethylene (pretreated), polycarbonate, polyester, polymethylmeth-acrylate, polypropylene (pretreated), polystyrene, polyurethane, powder coatings, SAN, textiles.
Characteristics:	Block resistant, permanently elastic, good coverage, suitable for food wrappings (exterior), air drying, oven drying, suitable for screen printing, abrasion resistant, flow (good), mechanical resistance.
Resistance:	Against: Diluted alkalis, alcohol, cleaning agents containing alcohol, chemicals, hand perspiration, organic solvents, oils and fats, diluted acids, water. Limited: Light, weather. Not resistant against products containing phenols.
Pretreatment:	Polypropylene, polyethylene, polyolefines
Thinner / retarder / hardener / additive:	VDS 1015 thinner quick-drying VDL 1015 thinner slow-drying VDL 380 thinner particularly for ink shade 02 VZ 380 retarder LMN hardener LMN 1 hardener (UV-resistant and weatherproof) VL levelling agent
Drying:	Chemical-reactive curing. Air drying (20° C) approx. 2–3 min., thermal shock drying approx. 30 sec. Oven drying: Time and temperature dependent on the materials to be printed (guide value: 80° C +/- 20 min. depending on ink layer thickness).
Curing:	At room temperature (20-25° C) approx. 3-4 days.
Storing:	Approx. 1 year in sealed original container, stored in cool and dry location.
Printing consistency:	5 parts M ink : 1 part LMN 1, LMN hardener. Ink ready for printing – add 10-20% VDS 1015, VDL 1015, VDL 380 thinner. Retarder – only use VZ 380 retarder. Pot life of the mixed ink approx. 12-14 hours. (LMN 1, LMN)
Typographical information:	If there is disruption to the flow, use VL levelling agent. When processing, cans containing LMN 1/LMN hardener must be tightly sealed immediately after removal.
Ability to overprint:	Yes - within 24 hours.
Note:	The high mechanical and chemical resistance is only achieved after complete curing of the ink.
Risk information:	■ In accordance with Directive 91/155/EEC, the "safety data sheet" contains the designation for hazardous material VO and information about protective measures to be taken with regard to processing, storage and waste disposal. The ink shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.
Cleaning:	Our RM cleaning agent is suitable for cleaning the tools and clichés. Use tampon cleaner to clean the tampons.

A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

Application technology:

If you have any further print and application-related queries, our application technology team will be happy to help.

E-mail: application@tampoprint.de, Fax: +49 7150 928-400

For your request

M-NT

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Our range						Your requirements	
Parts no.			**Standard ink shade**	**Container**	**Contents**	**Unit**	**Ink shade**
10	12	01** - 23**	Standard ink shades	1 litre	Density 1:2 – 2.0 kg!		
10	12	51	Silver	1 litre			
10	12	52	Gold	1 litre			
10	12	55	Black matt	1 litre			
Other ink shades on request							
Parts no.			**Thinner**	**Container**	**kg**		
12	01	07	VDL 1015	1 litre	approx. 1 kg		
12	91	07	VDL 1015	5 litres	approx. 5 kg		
12	01	05	VDL 380	1 litre	approx. 1 kg		
12	01	08	VDS 1015	1 litre	approx. 1 kg		
12	01	10	VDS 1015	5 litres	approx. 5 kg		
Parts no.			**Retarder**	**Container**	**kg**		
12	02	06	VZ 380	1 litre	approx. 1 kg		
Parts no.			**Hardener**	**Container**	**kg**		
12	23	01	LMN	0.2 litre	approx. 0.2 kg		
12	55	07	LMN	0.5 litre	approx. 0.5 kg		
12	03	03	LMN	1 litre	approx. 1 kg		
12	53	02	LMN 1	0.5	approx. 0.5 kg		
12	03	02	LMN 1	1 litre	approx. 1 kg		
Parts no.			**Levelling agent**	**Container**	**kg**		
12	05	01	VL	1 litre	approx. 1 kg		
Parts no.			**Cleaning agent**	**Container**	**kg**		
12	04	01	RM	1 litre	approx. 1 kg		
12	94	01	RM	30 litres	approx. 30 kg		
Parts no.			**Tampon cleaner**	**Container**	**kg**		
12	04	04	Tampon cleaner	1 litre	approx. 1 kg		
12	04	05	Tampon cleaner	5 litres	approx. 5 kg		

M

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** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

Application data sheet

N-NT 2-component ink, gloss ink

Applications:	Sporting items, tennis rackets, cosmetic products (e.g. shampoo bottles, cream jars), technical products.
Materials to be printed:	ABS, acrylic glass, aluminium, aluminium anodised, cellulose acetate, thermosetting plastics, glass, rigid PVC, HDPE and LDPE (pretreated), wood, ceramic, Lexan, non-ferrous metal, Noryl, lacquered surfaces, PETP, PET, polyacetate (thermal pretreated), polyamide, polyethylene (pretreated), polycarbonate, polyester, polymethylmethacrylate, polypropylene (pretreated), polystyrene, polyurethane, powder coatings, SAN, textiles.
Characteristics:	Block resistant, permanently elastic, suitable for food wrappings (exterior), air drying, oven drying, suitable for screen printing, abrasion resistant, slow drying, flow (good), mechanical resistance.
Resistance:	Against: Diluted alkalis, alcohol, cleaning agents containing alcohol, chemicals, hand perspiration, organic solvents, oils and fats, diluted acids, water. Limited: Weather. Not resistant against products containing phenols.
Pretreatment:	Polyolefines
Thinner / retarder / hardener / additive:	VDS 1015 thinner quick-drying VDL 1015 thinner slow-drying VDL 380 thinner (particularly for ink shade 02) VZ 380 retarder LMN hardener, LMN 1 hardener (UV-resistant) VL levelling agent
Drying:	Chemical-reactive curing. Air drying (20° C) approx. 2–3 min., thermal shock drying approx. 30 sec., thermal shock is recommended. Oven drying: Time and temperature dependent on the materials to be printed (guide value: 80° C +/- 20 min. depending on ink layer thickness).
Curing:	At room temperature (20-25° C) approx. 3-4 days.
Storing:	Approx. 1 year in sealed original container, stored in a cool and dry location.
Printing consistency:	5 parts N ink : 1 part LMN 1 or LMN hardener. Ink ready for printing – add 10-20% VDS 1015 or VDL 1015 thinner. Retarder – only use VZ 380 retarder. Pot life of the mixed ink approx. 12-14 hours. (LMN 1, LMN)
Typographical information:	If there is disruption to the flow, use VL levelling agent. When processing, cans containing LMN/LMN 1 hardener must be tightly sealed immediately after removal.
Ability to overprint:	Within 24 hours.
Note:	The high mechanical and chemical resistance is only achieved after complete curing of the ink.
Risk information:	■ In accordance with Directive 91/155/EEC, the "safety data sheet" contains the designation for hazardous material VO and information about protective measures to be taken with regard to processing, storage and waste disposal. The ink shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.
Cleaning:	Our RM cleaning agent is suitable for cleaning the tools and clichés. Use tampon cleaner to clean the tampons.

A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

Application technology:

If you have any further print and application-related queries, our application technology team will be happy to help.

E-mail: application@tampoprint.de, Fax: +49 7150 928-400

For your request

N-NT

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Our range

Parts no.			Standard ink shade	Container	Contents
10	13	01** - 23**	Standard ink shades	1 litre	Density 1.2 – 2.0 kg!
10	13	50	Clear colour	1 litre	
10	13	51	Silver	1 litre	
10	13	52	Gold	1 litre	
10	13	53	Gold brilliant	1 litre	
10	13	80	Process yellow Europe shade	1 litre	
10	13	81	Process magenta Europe shade	1 litre	
10	13	82	Process cyan Europe shade	1 litre	
Other ink shades on request					
10	13	83	Transparent paste	1 litre	
Parts no.			**Thinner**	**Container**	**kg**
12	01	07	VDL 1015	1 litre	approx. 1 kg
12	91	07	VDL 1015	5 litres	approx. 5 kg
12	01	05	VDL 380	1 litre	approx. 1 kg
12	01	08	VDS 1015	1 litre	approx. 1 kg
12	01	10	VDS 1015	5 litres	approx. 5 kg
Parts no.			**Retarder**	**Container**	**kg**
12	02	06	VZ 380	1 litre	approx. 1 kg
Parts no.			**Hardener**	**Container**	**kg**
12	23	01	LMN	0.2 litre	approx. 0.2 kg
12	55	07	LMN	0.5 litre	approx. 0.5 kg
12	03	03	LMN	1 litre	approx. 1 kg
12	53	02	LMN 1	0.5	approx. 0.5 kg
12	03	02	LMN 1	1 litre	approx. 1 kg
Parts no.			**Levelling agent**	**Container**	**kg**
12	05	01	VL	1 litre	approx. 1 kg
Parts no.			**Cleaning agent**	**Container**	**kg**
12	04	01	RM	1 litre	approx. 1 kg
12	94	01	RM	30 litres	approx. 20 kg
Parts no.			**Tampon cleaner**	**Container**	**kg**
12	04	04	Tampon cleaner	1 litre	approx. 1 kg
12	04	05	Tampon cleaner	5 litres	approx. 5 kg

Your requirements

Unit	Ink shade

N

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** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

Application data sheet

O-NT 1-component ink, gloss ink

Applications:	Food wrappings (e.g. cheese casings), advertising industry, toy industry.
Materials to be printed:	ABS, acrylic glass, aluminium anodised, cellulose acetate, rigid PVC, wood, leather, Lexan, Makrolon, Noryl, Novodur, lacquered surfaces, paper, polycarbonate, polyester, polymethacrylate, polypropylene (pretreated), polystyrene, powder coatings, SAN, textiles, soft PVC.
Characteristics:	Block resistant, permanently elastic, suitable for food wrappings, air drying, oven drying, suitable for screen printing, abrasion resistant, cutting/punching resistant, quick drying, stackable, can be deep drawn, flow (good), can be bonded, mechanical resistance.
Resistance:	Against: Alcohol, cleaning agents containing alcohol, chemicals (limited), hand perspiration, light, organic solvents (limited), oils and fats, water, weather. Limited: Diluted alkalis, diluted acids.
Pretreatment:	Polyolefines
Thinner / retarder / hardener / additive:	VDL 1015 thinner slow-drying VDS 1015 thinner quick-drying VDL 380 thinner particularly for ink shade 02 VZ 380 retarder PP-O coupling agent
Drying:	Physical drying. With air drying (20ºC) approx. 2 hours, wipe-dry and touch-dry in approx. 1-2 min., thermal shock 10-20 sec.
Curing:	Room temperature 24 hours (20° C). Oven drying: Time and temperature dependent on the materials to be printed (guide value: 80° C +/- 20 min. depending on ink layer thickness).
Storing:	At room temperature (20-25° C) approx. 1 year in sealed original container when stored in cool and dry location.
Printing consistency:	Ink ready for printing – add 10-20% VDL 1015 or VDS 1015 thinner. Retarder – only use VZ 380 retarder.
Typographical information:	When 10% of PP-O coupling agent is added, PP material can be printed without pretreatment with excellent adhesion.
Ability to overprint:	Yes
Note:	Caution: Preliminary tests are mandatory. Not to be used on PE material under any circumstances.
Risk information:	■ In accordance with Directive 91/155/EEC, the "safety data sheet" contains the designation for hazardous material VO and information about protective measures to be taken with regard to processing, storage and waste disposal. The ink shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.
Cleaning:	Our RM cleaning agent is suitable for cleaning the tools and clichés. Use tampon cleaner to clean the tampons.

A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

Application technology:

If you have any further print and application-related queries, our application technology team will be happy to help.

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For your request

O-NT **FAX +49 7150 928-433**

Our range						Your requirements	
Parts no.			**Standard ink shade**	**Container**	**Contents**	**Unit**	**Ink shade**
10	14	01** - 23**	Standard ink shades	1 litre	Density 1.2 – 2.0 kg!		
10	14	50	Clear colour	1 litre			
10	14	51	Silver	1 litre			
10	14	52	Gold	1 litre			
10	14	53	Gold brilliant	1 litre			
10	14	80	Process yellow Europe shade	1 litre			
10	14	81	Process magenta Europe shade	1 litre			
10	14	82	Process cyan Europe shade	1 litre			
Other ink shades on request							
10	14	83	Transparent paste	1 litre			
10	14	84	White, high coverage	1 litre			
Parts no.			**Thinner**	**Container**	**kg**		
12	01	07	VDL 1015	1 litre	approx. 1 kg		
12	91	07	VDL 1015	5 litres	approx. 5 kg		
12	01	05	VDL 380	1 litre	approx. 1 kg		
12	01	08	VDS 1015	1 litre	approx. 1 kg		
12	01	10	VDS 1015	5 litres	approx. 5 kg		
Parts no.			**Retarder**	**Container**	**kg**		
12	02	06	VZ 380	1 litre	approx. 1 kg		
Parts no.			**Coupling agent**	**Container**	**kg**		
10	14	85	PP-O	0.5 litre	approx. 0.5 kg		
Parts no.			**Cleaning agent**	**Container**	**kg**		
12	04	01	RM	1 litre	approx. 1 kg		
12	94	01	RM	30 litres	approx. 30 kg		
Parts no.			**Tampon cleaner**	**Container**	**kg**		
12	04	04	Tampon cleaner	1 litre	approx. 1 kg		
12	04	05	Tampon cleaner	5 litres	approx. 5 kg		

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under: http://www.tampoprint.de (Enquiry form)

** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

Application data sheet

P-NT 1- and 2-component ink, gloss ink

Applications:	Medical industry, packaging industry.
Materials to be printed:	Rigid PVC, HDPE and LDPE (pretreated), wood, lacquered surfaces, paper, polyacetate (thermal pretreated), polyethylene (pretreated), polycarbonate, polyester, polymethylmethacrylate, polypropylene (pretreated), polystyrene, polyurethane.
Characteristics:	Block resistant, suitable for food wrappings (exterior), air drying, oven drying, suitable for screen printing, quick drying, flow (good), mechanical resistance.
Resistance:	Against: Diluted alkalis, hand perspiration, oils and fats. Limited: Chemicals, diluted acids. 2-component ink against: Water.
Pretreatment:	All polyolefines
Thinner / retarder / hardener / additive:	VD 00 thinner (for corrosion problems) VD thinner slow-drying VD 3 thinner quick-drying VZ retarder BH hardener
Drying:	Physical drying and chemical cross-linking. At room temperature (20-25° C) approx. 2-3 min., with thermal influence / air circulation approx. 30-60 sec. Oven drying: Time and temperature dependent on the materials to be printed (guide value: 80° C +/- 20 min. depending on ink layer thickness).
Curing:	1-component ink at room temperature (20-25° C) approx. 24 hours 2-component ink + BH hardener at room temperature (20-25° C) 3-4 days
Storing:	At room temperature (20-25° C) approx. 1 year in sealed original container when stored in cool and dry location.
Printing consistency:	10 parts P ink : 1 part BH hardener. Ink ready for printing – add 10-20% VD or VD 3 thinner. With corrosion problems – add 10-20% VD 00 thinner. Retarder – only use VZ retarder. 2-component ink: Pot life of the mixed ink approx. 10 hours, after this you may have to deal with reduced adhesion and resistance even if the ink still appears fluid and ready for use.
Typographical information:	When exposed to greater mechanical and chemical loads or when a greater level of adhesion is required, P inks can also be used as 2-component printing inks. When processing, cans containing BH/GL hardener must be tightly sealed immediately after removal.
Ability to overprint:	1-component ink always, 2-component ink within 24 hours.
Note:	-
Risk information:	■ In accordance with Directive 91/155/EEC, the "safety data sheet" contains the designation for hazardous material VO and information about protective measures to be taken with regard to processing, storage and waste disposal. The ink shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.
Cleaning:	Our RM cleaning agent is suitable for cleaning the tools and clichés. Use tampon cleaner to clean the tampons.

A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

Application technology:

If you have any further print and application-related queries, our application technology team will be happy to help.

E-mail: application@tampoprint.de, Fax: +49 7150 928-400

For your request

P-NT

FAX +49 7150 928-433

Our range						Your requirements	
Parts no.			**Standard ink shade**	**Container**	**Contents**	**Unit**	**Ink shade**
13	09	01** - 23**	Standard ink shades	1 litre	Density 1.2 – 2.0 kg!		
13	09	50	Clear colour	1 litre			
13	09	51	Silver	1 litre			
13	09	52	Gold	1 litre			
13	09	80	Process yellow Europe shade	1 litre			
13	09	81	Process magenta Europe shade	1 litre			
13	09	82	Process cyan Europe shade	1 litre			
Other ink shades on request							
13	09	83	Transparent paste	1 litre			
Parts no.			**Thinner**	**Container**	**kg**		
12	01	01	VD	1 litre	approx. 1 kg		
12	91	01	VD	5 litres	approx. 5 kg		
12	01	03	VD 00	1 litre	approx. 1 kg		
12	01	04	VD 3	1 litre	approx. 1 kg		
Parts no.			**Retarder**	**Container**	**kg**		
12	02	01	VZ	1 litre	approx. 1 kg		
12	02	05	VZ-P	1 litre	approx. 1 kg		
Parts no.			**Hardener**	**Container**	**kg**		
12	02	99	BH	0.2 litre	approx. 0.2 kg		
12	53	01	BH	0.5 litre	approx. 0.5 kg		
12	03	01	BH	1 litre	approx. 1 kg		
Parts no.			**Cleaning agent**	**Container**	**kg**		
12	04	01	RM	1 litre	approx. 1 kg		
12	94	01	RM	30 litres	approx. 30 kg		
Parts no.			**Tampon cleaner**	**Container**	**kg**		
12	04	04	Tampon cleaner	1 litre	approx. 1 kg		
12	04	05	Tampon cleaner	5 litres	approx. 5 kg		

P

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** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

Application data sheet

Q-NT 1- and 2-component ink, gloss ink

Applications:	Good for fast printing cycles - "hermetic" systems, for slow printing cycles - "open" systems.
Materials to be printed:	ABS, acrylic glass, thermosetting plastics, rigid PVC, HDPE and LDPE (pretreated), wood, Makrolon, metals, non-ferrous metals, Noryl, paper, PETP, PET, polyacetate (thermal after-treated), polyamide, polycarbonate, polyester, polymethacrylate, polypropylene (pretreated), polystyrene, polyurethane, powder coating, SAN, textiles.
Characteristics:	Block resistant, permanently elastic, suitable for food wrappings (exterior), air drying, oven drying, suitable for screen printing, slow drying, flow (good), mechanical resistance.
Resistance:	Against: Diluted alkalis, chemicals, hand perspiration, organic solvents, oils and fats Limited: Alcohol, cleaning agents containing alcohol.
Pretreatment:	Polyolefines
Thinner / retarder / hardener / additive:	VDL 1015 thinner slow-drying VDL 380 thinner slow-drying, particularly suitable for ink shade 02 VDS 1015 thinner quick-drying LMN hardener
Drying:	1-component ink physical drying, 2-component ink chemical cross-linking. With infrared drying approx. 10-20 sec. Air drying (20° C) approx. 3 min. Oven drying (70–80° C) approx. 1-2 min. Oven drying: Time and temperature dependent on the materials to be printed (guide value: 80° C +/- 20 min. depending on ink layer thickness).
Curing:	1-component ink at room temperature (20° C) approx. 1 day. 2-component ink with LMN hardener with room temperature (20° C) approx. 3 days.
Storing:	Approx. 1 year in sealed original container, stored in cool and dry location.
Printing consistency:	5–10 parts Q ink : 1 part LMN hardener. Ink ready to print – add 10-20% VDL 1015 or VDS 1015 thinner. Pot life of the mixed ink at 20ºC, depending on hardener proportion 5 : 1 approx. 12 hours, 10 : 1 approx. 48 hours.
Typographical information:	When processing, cans containing LMN hardener must be tightly sealed immediately after removal. The ink shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.
Ability to overprint:	1-component ink always, 2-component ink within 24 hours.
Note:	-
Risk information:	■ In accordance with Directive 91/155/EEC, the "safety data sheet" contains the designation for hazardous material VO and information about protective measures to be taken with regard to processing, storage and waste disposal. When exposed to greater mechanical and chemical loads or when a greater level of adhesion is required, Q inks can also be used as 2-component printing inks.
Cleaning:	Our RM cleaning agent is suitable for cleaning the tools and clichés. Use tampon cleaner to clean the tampons.

A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

Application technology:

If you have any further print and application-related queries, our application technology team will be happy to help.

E-mail: application@tampoprint.de, Fax: +49 7150 928-400

For your request

Q-NT **FAX +49 7150 928-433**

Our range						Your requirements	
Parts no.			**Standard ink shade**	**Container**	**Contents**	**Unit**	**Ink shade**
13	16	01** - 23**	Standard ink shades	1 litre	Density 1.2 – 2.0 kg!		
13	16	50	Clear colour	1 litre			
13	16	51	Silver	1 litre			
13	16	52	Gold	1 litre			
13	16	80	Process yellow Europe shade	1 litre			
13	16	81	Process magenta Europe shade	1 litre			
13	16	82	Process cyan Europe shade	1 litre			
Other ink shades on request							
13	16	83	Transparent paste	1 litre			
Parts no.			**Thinner**	**Container**	**kg**		
12	01	07	VDL 1015	1 litre	approx. 1 kg		
12	91	07	VDL 1015	5 litres	approx. 5 kg		
12	01	05	VDL 380	1 litre	approx. 1 kg		
12	01	08	VDS 1015	1 litre	approx. 1 kg		
12	01	10	VDS 1015	5 litres	approx. 5 kg		
Parts no.			**Hardener**	**Container**	**kg**		
12	23	01	LMN	0.2 litre	approx. 0.2 kg		
12	55	07	LMN	0.5 litre	approx. 0.5 kg		
12	03	03	LMN	1 litre	approx. 1 kg		
Parts no.			**Cleaning agent**	**Container**	**kg**		
12	04	01	RM	1 litre	approx. 1 kg		
12	94	01	RM	30 litres	approx. 30 kg		
Parts no.			**Tampon cleaner**	**Container**	**kg**		
12	04	04	Tampon cleaner	1 litre	approx. 1 kg		
12	04	05	Tampon cleaner	5 litres	approx. 5 kg		

Q

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** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

Application data sheet

R-NT 1- and 2-component ink, gloss ink

Applications:	Ideal for high-load surfaces, automotive industry, washing machine trims, keyboards (+ UV protective lacquer).
Materials to be printed:	ABS, acrylic glass, rigid PVC, HDPE and LDPE (pretreated), wood, Makrolon, paper, polyamide, polyethylene (pretreated), polycarbonate, polyester, polymethylmethacrylate, polypropylene (pretreated), polystyrene, polyurethane.
Characteristics:	Block resistant, good coverage, suitable for food wrappings (exterior), air drying, oven drying, suitable for screen printing, abrasion resistant, quick drying, flow (good), mechanical resistance
Resistance:	Against: Chemicals, hand perspiration, organic solvents. Limited: Light, diluted acids. 2-component ink: Alcohol, diluted alkalis, cleaning agents containing alcohol, oils and fats, diluted acids.
Pretreatment:	Polyolefines
Thinner / retarder / hardener / additive:	VDS 1015 thinner quick-drying VDL 1015 thinner slow-drying VDL 380 thinner slow-drying, particularly suitable for ink shade 02 VZ 380 retarder LMN hardener LMN 1 hardener
Drying:	Chemical-reactive curing. Air drying (20° C) approx. 1-3 min., oven drying at 40-50° C approx. 1-2 min., thermal shock drying approx. 2-3 sec., flame drying possible. Oven drying: Time and temperature dependent on the materials to be printed (guide value: 80° C +/- 20 min. depending on ink layer thickness).
Curing:	1-component ink at room temperature (20-25° C) approx. 1 day. 2-component ink with LMN hardener at room temperature (20-25° C) approx. 2 days.
Storing:	Approx. 1 year in sealed original container, stored in cool and dry location.
Printing consistency:	10 parts R ink : 1 part LMN hardener. Ink ready for printing – add 10-20% VDS 1015, VDL 380 or VDL 1015 thinner. Retarder – only use VZ 380 retarder. Pot life of the mixed ink approx. 36 hours.
Typographical information:	When processing, cans containing LMN hardener must be tightly sealed immediately after removal. When exposed to greater mechanical and chemical loads or when a greater level of adhesion is required, R inks can also be used as 2-component printing inks.
Ability to overprint:	1-component ink always, 2-component ink within 24 hours.
Note:	-
Risk information:	■ In accordance with Directive 91/155/EEC, the "safety data sheet" contains the designation for hazardous material VO and information about protective measures to be taken with regard to processing, storage and waste disposal. The ink shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.
Cleaning:	Our RM cleaning agent is suitable for cleaning the tools and clichés. Use tampon cleaner to clean the tampons.

A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

Application technology:

If you have any further print and application-related queries, our application technology team will be happy to help.

E-mail: application@tampoprint.de, Fax: +49 7150 928-400

For your request

R-NT

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Our range						Your requirements	
Parts no.			**Standard ink shade**	**Container**	**Contents**	**Unit**	**Ink shade**
10	17	01** - 23**	Standard ink shades	1 litre			
10	17	49	Bronze binder	1 litre			
10	17	50	Clear colour	1 litre			
10	17	51	Silver	1 litre	Density 1.2 – 2.0 kg!		
10	17	52	Gold	1 litre			
10	17	53	Gold brilliant	1 litre			
10	17	80	Process yellow Europe shade	1 litre			
10	17	81	Process magenta Europe shade	1 litre			
10	17	82	Process cyan Europe shade	1 litre			
Other ink shades on request							
10	17	83	Transparent paste	1 litre			
Parts no.			**Thinner**	**Container**	**kg**		
12	01	05	VDL 380	1 litre	approx. 1 kg		
12	01	07	VDL 1015	1 litre	approx. 1 kg		
12	91	07	VDL 1015	5 litres	approx. 5 kg		
12	01	08	VDS 1015	1 litre	approx. 1 kg		
12	01	10	VDS 1015	5 litres	approx. 5 kg		
Parts no.			**Retarder**	**Container**	**kg**		
12	02	06	VZ 380	1 litre	approx. 1 kg		
Parts no.			**Hardener**	**Container**	**kg**		
12	23	01	LMN	0.2 litre	approx. 0.2 kg		
12	55	07	LMN	0.5 litre	approx. 0.5 kg		
12	03	03	LMN	1 litre	approx. 1 kg		
12	53	02	LMN 1	0.5	approx. 0.5 kg		
12	03	02	LMN 1	1 litre	approx. 1 kg		
Parts no.			**Cleaning agent**	**Container**	**kg**		
12	04	01	RM	1 litre	approx. 1 kg		
12	94	01	RM	30 litres	approx. 30 kg		
Parts no.			**Tampon cleaner**	**Container**	**kg**		
12	04	04	Tampon cleaner	1 litre	approx. 1 kg		
12	04	05	Tampon cleaner	5 litres	approx. 5 kg		

R

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** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

Application data sheet

S-NT 2-component ink, gloss ink

Applications:	Automotive industry (engine compartment trims), labels.
Materials to be printed:	ABS, metal, aluminium.
Characteristics:	Permanently elastic, good coverage, suitable for food wrappings (exterior), air drying, oven drying, suitable for screen printing, abrasion resistant, quick drying, flow (good), mechanical resistance.
Resistance:	Against: Alcohol, cleaning agents containing alcohol, diluted alkalis, chemicals, hand perspiration, light, diluted acids, water, weather.
Pretreatment:	Print surfaces must be free from fats or other residue.
Thinner / retarder / hardener / additive:	VDS 1015 thinner quick-drying VDL 1015 thinner slow-drying VZ 380 retarder LMN 1 hardener
Drying:	Chemical-reactive curing. Air drying (20° C) approx. 2-3 minutes. Thermal shock drying approx. 30 sec. Oven drying: Time and temperature dependent on the materials to be printed (guide value: 80° C +/- 20 min. depending on ink layer thickness).
Curing:	72 hours at room temperature 20-25° C.
Storing:	Approx. 1 year in sealed original container, stored in cool and dry location.
Printing consistency:	10 parts S ink : 1 part LMN 1 hardener. Ink ready to print – add 10-20% VDL 1015 or VDS 1015 thinner. Retarder – only use VZ 380 retarder. Pot life of the mixed ink at 20° C approx. 12 hours.
Typographical information:	-
Ability to overprint:	Reactively curing inks are almost free of solvents after curing. S inks can only be overprinted within approx. 6 hours.
Note:	The high mechanical and chemical resistance is only achieved after the ink has fully hardened.
Risk information:	■ In accordance with Directive 91/155/EEC, the "safety data sheet" contains the designation for hazardous material VO and information about protective measures to be taken with regard to processing, storage and waste disposal. The ink shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.
Cleaning:	Our RM cleaning agent is suitable for cleaning the tools and clichés. Use tampon cleaner to clean the tampons.

S

A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

Application technology:

If you have any further print and application-related queries, our application technology team will be happy to help.

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For your request

S-NT

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Our range

Parts no.			Standard ink shade	Container	Contents
10	18	01** - 23**	Standard ink shades	1 litre	Density 1.2 – 2.0 kg!
10	18	50	Clear colour	1 litre	
10	18	51	Silver	1 litre	
10	18	52	Gold	1 litre	
10	18	80	Process yellow Europe shade	1 litre	
10	18	81	Process magenta Europe shade	1 litre	
10	18	82	Process cyan Europe shade	1 litre	
Other ink shades on request					
Parts no.			**Thinner**	**Container**	**kg**
12	01	07	VDL 1015	1 litre	approx. 1 kg
12	91	07	VDL 1015	5 litres	approx. 5 kg
12	01	08	VDS 1015	1 litre	approx. 1 kg
12	01	10	VDS 1015	5 litres	approx. 5 kg
Parts no.			**Retarder**	**Container**	**kg**
12	02	06	VZ 380	1 litre	approx. 1 kg
Parts no.			**Hardener**	**Container**	**kg**
12	53	02	LMN 1	0.5	approx. 0.5 kg
12	03	02	LMN 1	1 litre	approx. 1 kg
Parts no.			**Cleaning agent**	**Container**	**kg**
12	04	01	RM	1 litre	approx. 1 kg
12	94	01	RM	30 litres	approx. 30 kg
Parts no.			**Tampon cleaner**	**Container**	**kg**
12	04	04	Tampon cleaner	1 litre	approx. 1 kg
12	04	05	Tampon cleaner	5 litres	approx. 5 kg

Your requirements

Unit	Ink shade

S

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** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

Application data sheet

W-NT 2-component ink, gloss ink

Applications:	Packaging industry, preferably "open" systems.
Materials to be printed:	ABS, thermosetting plastics, rigid PVC, HDPE and LDPE (pretreated), metal, non-ferrous metal, Noryl, polyamide, polyethylene (pretreated), polycarbonate, polyester, polymethylmethacrylate, polypropylene (pretreated), polystyrene, polyurethane.
Characteristics:	Suitable for food wrappings (exterior), air drying, oven drying, suitable for screen printing, quick drying, flow (good), very good mechanical resistance.
Resistance:	Diluted alkalis, chemicals, hand perspiration, organic solvents, oils and fats, diluted acids, water.
Pretreatment:	All polyolefines
Thinner / retarder / hardener / additive:	VD thinner slow-drying VD 3 thinner quick-drying VZ retarder BH hardener
Drying:	After the BH hardener is added, chemical-physical drying. At room temperature (20-25° C) approx. 2 min., with thermal influence / air circulation approx. 20-30 sec., with thermodiffusion a few sec.. Oven drying: Time and temperature dependent on the materials to be printed (guide value: 80° C +/- 20 min. depending on ink layer thickness).
Curing:	At room temperature (20° C) approx. 5 days.
Storing:	Approx. 1 year in sealed original container, stored in cool and dry location. When processing, cans containing BH hardener must be tightly sealed immediately after removal.
Printing consistency:	2-3 parts W ink : 1 part BH hardener. Ink ready for printing – add 10-20% VD or VD 3 thinner. Retarder – only use VZ retarder. Pot life of the mixed ink approx. 6-8 hours, after this you may have to deal with reduced adhesion and resistance even if the ink still appears fluid and ready for use.
Typographical information:	The best multicolour prints with superimposed ink surfaces can be achieved when the printing units are connected in line with intermediate drying stations.
Ability to overprint:	W inks can only be overprinted within approx. 8 hours.
Note:	-
Risk information:	■ In accordance with Directive 91/155/EEC, the "safety data sheet" contains the designation for hazardous material VO and information about protective measures to be taken with regard to processing, storage and waste disposal. The ink shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.
Cleaning:	Our RM cleaning agent is suitable for cleaning the tools and clichés. Use tampon cleaner to clean the tampons.

W

A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

Application technology:

If you have any further print and application-related queries, our application technology team will be happy to help.

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For your request

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Our range						Your requirements	
Parts no.			**Standard ink shade**	**Container**	**Contents**	**Unit**	**Ink shade**
10	21	01** - 23**	Standard ink shades	1 litre	Density 1.2 – 2.0 kg!		
10	21	50	Bronze binder	1 litre			
10	21	80	Process yellow Europe shade	1 litre			
10	21	81	Process magenta Europe shade	1 litre			
10	21	82	Process cyan Europe shade	1 litre			
Other ink shades on request							
10	21	83	Transparent paste	1 litre			
Parts no.			**Thinner**	**Container**	**kg**		
12	01	01	VD	1 litre	approx. 1 kg		
12	91	01	VD	5 litres	approx. 5 kg		
12	01	04	VD 3	1 litre	approx. 1 kg		
Parts no.			**Retarder**	**Container**	**kg**		
12	02	01	VZ	1 litre	approx. 1 kg		
Parts no.			**Hardener**	**Container**	**kg**		
12	02	99	BH	0.2 litre	approx. 0.2 kg		
12	53	01	BH	0.5 litre	approx. 0.5 kg		
12	03	01	BH	1 litre	approx. 1 kg		
Parts no.			**Cleaning agent**	**Container**	**kg**		
12	04	01	RM	1 litre	approx. 1 kg		
12	94	01	RM	30 litres	approx. 30 kg		
Parts no.			**Tampon cleaner**	**Container**	**kg**		
12	04	04	Tampon cleaner	1 litre	approx. 1 kg		
12	04	05	Tampon cleaner	5 litres	approx. 5 kg		

W

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** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

Application data sheet

LC-NT 1- and 2-component ink, gloss ink, preset

Applications:	Low-cost tampon printing ink type, can be universally used.
Materials to be printed:	ABS, acrylic glass, thermosetting plastic, rigid PVC, wood, Makrolon, metal, non-ferrous metal, Noryl, Novadur (SAN), lacquered and powder coated surfaces, paper, PETP, PET, polyacetate (heat finishing treatment), polyamide, polyethylene (pretreated), polycarbonate, polyester, polymetacrylate, polypropylene (pretreated), polystyrene, polyurethane, powder coatings, SAN, textiles.
Characteristics:	Block resistant, permanently elastic, good coverage, suitable for food wrappings (exterior), air drying, oven drying, suitable for screen printing, abrasion resistant, stackable, flow (good).
Resistance:	Limited: light, water, diluted acids. 2-component ink: diluted alkalis, alcohol, numerous chemicals, hand perspiration, oils and fats.
Pretreatment:	-
Thinner / retarder / hardener / additive:	Thinner VDS-LC quick-drying Thinner VDL-LC slow-drying Hardener LMN
Drying:	Chemical-reactive curing. Air drying (20° C) approx. 5 min. Oven drying at 40-50° C approx. 1-2 min., thermal shock drying approx. 2-3 sec., flame drying possible.
Curing:	1-component ink at room temperature (20° C) approx.1 day. 2-component ink at room temperature (20° C) approx. 3 days.
Storing:	Approx. 1 year in sealed original container, stored in cool and dry location.
Printing consistency:	10 parts ink LC : 1 part hardener LMN Ink ready for printing. Pot life of the ink mixed with hardener approx. 24 hours.
Typographical information:	We recommend special products tests in accordance with customer regulations. When processing, cans containing LMN hardener must be tightly sealed immediately after removal.
Ability to overprint:	1-component ink yes, 2-component within 24 hours.
Note:	When exposed to greater mechanical and chemical loads or when a greater level of adhesion is required, LC inks can also be used as 2-component printing inks.
Risk information:	■ In accordance with Directive 91/155/EEC, the "safety data sheet" contains the designation for hazardous material VO and information about protective measures to be taken with regard to processing, storage and waste disposal. The ink shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.
Cleaning:	Our RM cleaning agent is suitable for cleaning the tools and clichés. Use tampon cleaner to clean the tampons.

LC

A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

Application technology:

If you have any further print and application-related queries, our application technology team will be happy to help.

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For your request

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Our range						Your requirements	
Parts no.			**Standard ink shade**	**Container**	**Contents**	**Unit**	**Ink shade**
13	15	01** - 23**	Standard ink shade	1 litre	Density 1.2 – 2.0 kg!		
13	15	50	Clear colour	1 litre			
13	15	51	Silver	1 litre			
13	15	52	Gold	1 litre			
13	15	80	Process yellow Europe shade	1 litre			
13	15	81	Process red Europe shade	1 litre			
13	15	82	Process blue Europe shade	1 litre			
Other ink shades on request							
Parts no.			**Thinner**	**Container**	**kg**		
12	01	22	VDS-LC	1 litre	approx. 1 kg		
12	01	23	VDL-LC	1 litre	approx. 1 kg		
Parts no.			**Hardener**	**Container**	**kg**		
12	23	01	LMN	0,2 Liter	approx.0,2 kg		
Parts no.			**Cleaning agent**	**Container**	**kg**		
12	04	01	RM	1 litre	approx. 1 kg		
12	94	01	RM	30 litre	approx. 30 kg		
Parts no.			**Tampon cleaner**	**Container**	**kg**		
12	04	04	Tampon cleaner	1 litre	approx. 1 kg		
12	04	05	Tampon cleaner	5 litre	approx. 5 kg		

LC

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** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

Application data sheet

GU-NT 1- and 2-component ink, satin finish

Applications:	Elastic tampon printing ink type, often used in the automotive industry and by tools manufacturers.
Materials to be printed:	Elastomers, rubber, PV, soft lacquers, thermoplastics, soft PVC.
Characteristics:	Permanently elastic, air drying, oven drying, quick drying, can be deep drawn.
Resistance:	Against: Chemicals, hand perspiration, oils and fats, weather. Limited: Light, diluted alkalis, diluted acids. 2-component ink: Cleaning agents containing alcohol, alcohol, water.
Pretreatment:	-
Thinner / retarder / hardener / additive:	TP-GU thinner BH hardener BH-N hardener
Drying:	Physical or chemically drying. Air drying (20° C) approx. 1 min., with thermal influence approx. 10-20 sec. Oven drying: Time and temperature dependent on the materials to be printed (guide value: 80° C +/- 20 min. depending on ink layer thickness).
Curing:	2-component ink approx. 2-3 days.
Storing:	Approx. 1/2 year in sealed original container, stored in cool and dry location.
Printing consistency:	The GU ink can be used as a 1- or 2-component ink. 10 parts GU ink : 1 part BH hardener. Pot life of the mixed ink at 20° C approx. 8 hours.
Typographical information:	When exposed to greater mechanical and chemical loads or when a greater level of adhesion is required, GU inks can also be used as 2-component printing inks. With BH-N hardener, GU ink types have better adhesion properties on a flexible background.
Ability to overprint:	1-component ink yes, 2-component ink within 24 hours.
Note:	Please take the longer delivery time into account when ordering.
Risk information:	■ In accordance with Directive 91/155/EEC, the "safety data sheet' contains the designation for hazardous material VO and information about protective measures to be taken with regard to processing, storage and waste disposal. The ink shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.
Cleaning:	Our RM cleaning agent is suitable for cleaning the tools and clichés. Use tampon cleaner to clean the tampons.

GU

A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

Application technology:

If you have any further print and application-related queries, our application technology team will be happy to help.

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For your request

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Our range						Your requirements	
Parts no.			**Standard ink shade**	**Container**	**Contents**	**Unit**	**Ink shade**
10	09	01** - 23**	Standard ink shades	1 litre	Density 1.2 – 2.0 kg!		
10	09	50	Clear colour	1 litre			
10	09	51	Silver	1 litre			
10	09	52	Gold	1 litre			
Other ink shades on request							
Parts no.			**Thinner**	**Container**	**kg**		
12	01	18	TP-GU	1 litre	approx. 1 kg		
Parts no.			**Hardener**	**Container**	**kg**		
12	02	99	BH	0.2 litre	approx. 0.2 kg		
12	53	01	BH	0.5 litre	approx. 0.5 kg		
12	03	01	BH	1 litre	approx. 1 kg		
12	23	08	BH-N	0.5 litre	approx. 0.5 kg		
12	03	08	BH-N	1 litre	approx. 1 kg		
Parts no.			**Cleaning agent**	**Container**	**kg**		
12	04	01	RM	1 litre	approx. 1 kg		
12	94	01	RM	30 litres	approx. 30 kg		
Parts no.			**Tampon cleaner**	**Container**	**kg**		
12	04	04	Tampon cleaner	1 litre	approx. 1 kg		
12	04	05	Tampon cleaner	5 litres	approx. 5 kg		

GU

Contact us:
Sales Tampon printing ink.
E-Mail:colour@tampoprint.de, Fax: +49 7150 928-433
under: http://www.tampoprint.de (Enquiry form)

** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

Application data sheet

GU-N-NT 1- and 2-component ink, satin finish

Applications:	Tampon printing ink type, preferentially used for the printing of flexible undergrounds.
Materials to be printed:	Textiles, rubber, leather, artificial leather, polyurethane, soft PVC, TPE, elastomers, soft lacquers.
Characteristics:	Quick drying, air drying, oven drying, satin finish, average covering power, can be deep drawn. The print is permanently elastic and largely allows deformations of the underground.
Resistance:	Against: Chemicals, hand perspiration, light, oils and fats, weather. Limited: Diluted alcalis, diluted acids. 2-component ink: alcohol, cleaning agents containing alcohol, water.
Pretreatment:	Pretreatment must be checked.
Thinner / retarder / hardener / additive:	Thinner VD slow-drying Thinner VD 3 quick-drying Hardener BH-N
Drying:	Physical or chemical drying. Room temperature (20-25° C) approx. 1-2 minutes. With thermal influence approx. 10-20 seconds.
Curing:	2-component ink approx. 3 days (room temperature 20-25° C).
Storing:	Approx. 1/2 year sealed original container, stored in cool and dry location. Please take the longer delivery time into account when ordering.
Printing consistency:	The ink GU-N can be used as 1- and 2-component ink. 10 parts ink GU-N : 1 part Hardener BH-N 15-30% Thinner VD or VD 3 Pot life of the mixed ink at 20° C approx. 8 hours.
Typographical information:	As the printing material can strongly differ with regard to their chemical constitution and the manufacturing method, it is always necessary to carry out a suitability test.
Ability to overprint:	1-component ink yes, 2-component ink within 24 hours.
Note:	When exposed to greater chemical and mechanical loads or when a greater level of adhesion is required, the ink type GU-N can also be used as 2-component ink.
Risk information:	■ In accordance with Directive 91/155/EEC, the "safety data sheet" contains the designation for hazardous material VO and information about protective measures to be taken with regard to processing, storage and waste disposal. The ink shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.
Cleaning:	Our RM cleaning agent is suitable for cleaning the tools and clichés. Use tampon cleaner to clean the tampons.

GU-N

A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

Application technology:

If you have any further print and application-related queries, our application technology team will be happy to help.

E-mail: application@tampoprint.de, Fax: +49 7150 928-400

For your request

GU-N-NT FAX +49 7150 928-433

Our range						Your requirements	
Parts no.			**Standard ink shade**	**Container**	**Contents**	**Unit**	**Ink shade**
13	28	01** - 06**	Standard ink shades	1 litre			
13	28	08** - 10**	Standard ink shades	1 litre			
13	28	12** - 22**	Standard ink shades	1 litre			
13	28	50	Clear colour	1 litre			
13	28	51	Silver	1 litre			
13	28	52	Gold	1 litre			
13	28	80	Process yellow Europe shade	1 litre			
13	28	81	Process red Europe shade	1 litre			
13	28	82	Process blue Europe shade	1 litre	Density 1.2 – 2.0 kg!		
Other ink shades on request							
Parts no.			**Thinner**	**Container**	**kg**		
12	01	01	VD	1 litre	approx. 1 kg		
12	01	04	VD 3	1 litre	approx. 1 kg		
Parts no.			**Hardener**	**Container**	**kg**		
12	23	08	BH-N	0,5 litre	approx. 0,5 kg		
12	03	08	BH-N	1 litre	approx. 1 kg		
Parts no.			**Cleaning agent**	**Container**	**kg**		
12	04	01	RM	1 litre	approx. 1 kg		
12	94	01	RM	30 litre	approx. 30 kg		
Parts no.			**Tampon cleaner**	**Container**	**kg**		
12	04	04	Tampon cleaner	1 litre	approx. 1 kg		
12	04	05	Tampon cleaner	5 litre	approx. 5 kg		

GU-N

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** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

Application data sheet

TH-NT 1-component ink, stoving ink, gloss ink

Applications:	Special tampon printing ink type for surface stoving of surfaces which are exposed to high temperatures, e.g.: light bulbs.
Materials to be printed:	Glass, ceramic, metal, heat-resistant moulding material.
Characteristics:	Good coverage, oven drying, chemical and mechanical resistance
Resistance:	Against: Chemicals, oils and fats, diluted acids, weather. Limited: Diluted alkalis.
Pretreatment:	-
Thinner / retarder / hardener / additive:	VDL 1015 thinner slow-drying VZ 380 retarder
Drying:	Physical drying followed by oven drying with chemical cross-linking. Alternative drying data: 40 min. at 180° C or 20 min. at 200° C. The pigments used have only limited, short-term heat resistance at 400° C. Overheating – also locally – as well as appreciably exceeding the curing times may lead to fluctuations in shades.
Curing:	Oven drying: 40 minutes at 180° C or 20 minutes at 200° C.
Storing:	Approx. 1/2 year in sealed original container, stored in cool and dry location.
Printing consistency:	Ink ready for printing – add 10-20% VDL 1015 thinner. Retarder – only use VZ 380 retarder.
Typographical information:	Special product tests required in individual cases. It should be taken into account that the screening and the etching depth of the tampon printing cliché, as well as the form and hardness (Shore) of the tampon and the printing speed of the tampon printing machine will all influence the printing result.
Ability to overprint:	Yes, before curing.
Note:	TH ink types only available on order. No stock.
Risk information:	■ In accordance with Directive 91/155/EEC, the "safety data sheet" contains the designation for hazardous material VO and information about protective measures to be taken with regard to processing, storage and waste disposal. The ink shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.
Cleaning:	Our RM cleaning agent is suitable for cleaning the tools and clichés. Use tampon cleaner to clean the tampons.

TH

A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

Application technology:

If you have any further print and application-related queries, our application technology team will be happy to help.

E-mail: application@tampoprint.de, Fax: +49 7150 928-400

For your request

TH-NT

FAX +49 7150 928-433

Our range						Your requirements	
Parts no.			**Standard ink shade**	**Container**	**Contents**	**Unit**	**Ink shade**
10	31	93	01 black	1 litre			
10	33	84	02 white	1 litre			
10	37	83	04 yellow medium	1 litre			
10	37	08	05 yellow dark	1 litre			
10	32	45	06 orange	1 litre			
10	50	13	09 signal red	1 litre	Density 1.2 – 2.0 kg/l		
Other ink shades on request							
Parts no.			**Thinner**	**Container**	**kg**		
12	01	07	VDL 1015	1 litre	approx. 1 kg		
12	91	07	VDL 1015	5 litres	approx. 5 kg		
Parts no.			**Retarder**	**Container**	**kg**		
12	02	06	VZ 380	1 litre	approx. 1 kg		
Parts no.			**Cleaning agent**	**Container**	**kg**		
12	04	01	RM	1 litre	approx. 1 kg		
12	94	01	RM	30 litres	approx. 30 kg		
Parts no.			**Tampon cleaner**	**Container**	**kg**		
12	04	04	Tampon cleaner	1 litre	approx. 1 kg		
12	04	05	Tampon cleaner	5 litres	approx. 5 kg		

TH

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** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

Application data sheet

TP-CD-NT 1- and 2-component ink, gloss ink

Applications:	Often used for lacquered and powder-coated surfaces, e.g.: spring legs.
Materials to be printed:	CDs, metal, non-ferrous metal, lacquered and powder-coated surfaces, polyethylene (pretreated), polypropylene (pretreated), soft lacquers (limited), thermoplastics, UV lacquer.
Characteristics:	Air drying, oven drying, quick drying.
Resistance:	Against: Hand perspiration, light, oils and fats, water, weather. Limited: Chemicals, organic solvents. 2-component ink: Alcohol, cleaning agents containing alcohol.
Pretreatment:	-
Thinner / retarder / hardener / additive:	CDV thinner slow-drying VD 3 thinner quick-drying TPD retarder BH hardener
Drying:	Touch-dry: 1-2 min. Shock-dry: (infrared) 5-10 sec. Oven drying: Time and temperature dependent on the materials to be printed (guide value: 80° C +/- 20 min. depending on ink layer thickness).
Curing:	2-component ink – complete curing without heat 3-5 days.
Storing:	Approx. 1 year in sealed original container, stored in cool and dry location.
Printing consistency:	10 parts TP-CD ink : 1 part BH hardener. Ink ready to print – add 10-30% CDV thinner. Retarder – only use TP D retarder. Pot life of the mixed ink approx. 8 hours
Typographical information:	It should be taken into account that the screening and the etching depth of the tampon printing cliché, as well as the form and hardness (Shore) of the tampon and the printing speed of the tampon printing machine will influence the printing result.
Ability to overprint:	Yes
Note:	When exposed to greater mechanical and chemical loads or when a greater level of adhesion is required, TP-CD inks can also be used as 2-component printing inks.
Risk information:	■ In accordance with Directive 91/155/EEC, the "safety data sheet" contains the designation for hazardous material VO and information about protective measures to be taken with regard to processing, storage and waste disposal. The ink shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.
Cleaning:	Our RM cleaning agent is suitable for cleaning the tools and clichés. Use tampon cleaner to clean the tampons.

TP-CD

A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

Application technology:

If you have any further print and application-related queries, our application technology team will be happy to help.

E-mail: application@tampoprint.de, Fax: +49 7150 928-400

For your request

TP-CD-NT

FAX +49 7150 928-433

Our range						Your requirements	
Parts no.			**Standard ink shade**	**Container**	**Contents**	**Unit**	**Ink shade**
13	25	01** - 23**	Standard ink shades	1 litre	Density 1.2 – 2.0 kg!		
13	25	50	Clear colour	1 litre			
13	25	51	Silver	1 litre			
13	25	52	Gold	1 litre			
13	25	80	Process yellow Europe shade	1 litre			
13	25	81	Process magenta Europe shade	1 litre			
13	25	82	Process cyan Europe shade	1 litre			
Other ink shades on request							
Parts no.			**Thinner**	**Container**	**kg**		
12	01	09	CDV	1 litre	approx. 1 kg		
12	01	04	VD 3	1 litre	approx. 1 kg		
Parts no.			**Retarder**	**Container**	**kg**		
12	02	07	TP D	1 litre	approx. 1 kg		
Parts no.			**Hardener**	**Container**	**kg**		
12	02	99	BH	0.2 litre	approx. 0.2 kg		
12	53	01	BH	0.5 litre	approx. 0.5 kg		
12	03	01	BH	1 litre	approx. 1 kg		
Parts no.			**Cleaning agent**	**Container**	**kg**		
12	04	01	RM	1 litre	approx. 1 kg		
12	94	01	RM	30 litres	approx. 30 kg		
Parts no.			**Tampon cleaner**	**Container**	**kg**		
12	04	04	Tampon cleaner	1 litre	approx. 1 kg		
12	04	05	Tampon cleaner	5 litres	approx. 5 kg		

TP-CD

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** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

Application data sheet

TP-PP-NT 1-component ink, gloss ink

Applications:	Special tampon printing ink type for printing on PP materials without pretreatment.
Materials to be printed:	Polypropylene (PP), not pretreated.
Characteristics:	Air drying, oven drying, physical drying, high coverage, glossy, good mechanical resistance, suitable for food wrappings (exterior).
Resistance:	Against: Light, weather, chemicals. Limited: Fats and oils, cleaning agents containing alcohol, water.
Pretreatment:	None
Thinner / retarder / hardener / additive:	Thinner VD-PP/S Thinner VD-PP/L Thinner VZ-PP
Drying:	At room temperature (21° C) approx. 2-3 min. (fast to handling). To accelerate the ink drying on the substrate the use of a hot-air dryer or an infrared lamp is useful.
Curing:	Note: After the heat drying a cooling zone must be available since otherwise the printed parts could stick together.
Storing:	At 21° C at least 12 months in sealed original container guaranteed. Higher storage temperatures may reduce the storage stability.
Printing consistency:	Ink ready for printing – add 10–20 % Thinner VD-PP/S or VD-PP/L. Retarder – only use Retarder VZ-PP.
Typographical information:	As the printing materials can strongly differ with regard to their chemical constitution and the manufacturing method, it is always necessary to carry out a suitability test. In particular antistatic additives as well as separating agents and lubricants can have a negative effect on the ink adhesion.
Ability to overprint:	Yes
Note:	Ink type TP-PP only available on order. No stock. The ink TP-PP has a high coverage property and the only ink shades available are white, black, yellow and red. All other ink shades can be mixed as special ink shades.
Risk information:	■ In accordance with Directive 91/155/EEC, the "safety data sheet" contains the designation for hazardous material VO and information about protective measures to be taken with regard to processing, storage and waste disposal. The ink shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.
Cleaning:	Our RM cleaning agent is suitable for cleaning the tools and clichés. Use tampon cleaner to clean the tampons.

TP-PP

A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

Application technology:

If you have any further print and application-related queries, our application technology team will be happy to help.

E-mail: application@tampoprint.de, Fax: +49 7150 928-400

For your request

TP-PP-NT FAX +49 7150 928-433

Our range						Your requirements	
Parts no.			**Standard ink shade**	**Container**	**Contents**	**Unit**	**Ink shade**
10	57	21	black HD (high coverage)	1 litre	Density 1:2 – 2.0 kg!		
10	57	22	white HD (high coverage)	1 litre			
10	57	23	red HD (high coverage)	1 litre			
10	57	24	yellow HD (high coverage)	1 litre			
Other ink shades on request							
Parts no.			**Thinner**	**Container**	**kg**		
12	01	32	VD-PP/L	1 litre	approx. 1 kg		
12	01	33	VD-PP/S	1 litre	approx. 1 kg		
Parts no.			**Retarder**	**Container**	**kg**		
12	02	10	VZ-PP	1 litre	approx. 1 kg		
Parts no.			**Cleaning agent**	**Container**	**kg**		
12	04	01	RM	1 litre	approx. 1 kg		
12	94	01	RM	30 litre	approx. 30 kg		
Parts no.			**Tampon cleaner**	**Container**	**kg**		
12	04	04	Tampon cleaner	1 litre	approx. 1 kg		
12	04	05	Tampon cleaner	5 litre	approx. 5 kg		

TP-PP

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** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

Application data sheet

RDF-NT

1- and 2-component ink, gloss ink, rotaty printing ink

Applications:	Special rotary tampon printing ink. Bottle closures made of polyethylene and polypropylene (pretreated).
Materials to be printed:	Thermosetting plastics, HDPE and LDPE (pretreated), lacquered and powder-coated surfaces, polyethylene (pretreated), polypropylene (pretreated), soft lacquers (limited), thermoplastics, UV lacquer.
Characteristics:	Impact resistant, block resistant, good coverage, suitable for food wrappings (exterior), air drying, oven drying, abrasion resistant, stackable, quick drying, flow (good), mechanical resistance (limited).
Resistance:	Limited: Light, water, diluted acids. 2-component ink: Diluted alkalis, alcohol, numerous chemicals, hand perspiration, oils and fats.
Pretreatment:	Polyethylene, polypropylene.
Thinner / retarder / hardener / additive:	VDS-RDF thinner quick-drying VDL-RDF thinner slow-drying LMN hardener
Drying:	Chemical-reactive curing Air drying (20° C) approx. 5 min. Oven drying at 40-50° C approx. 1-2 min. Thermal shock drying approx. 2-3 sec. Flame drying possible.
Curing:	1-component ink 1 day. 2-component ink 3 days
Storing:	Approx. 1 year in sealed original container, stored in cool and dry location.
Printing consistency:	Ink ready for printing – add 5-15% VDS-RDF or VDL-RDF thinner. Pot life of the ink mixed with hardener approx. 24 hours. 10 parts RDF ink : 1 part LMN hardener.
Typographical information:	We recommend special product tests in accordance with customer regulations. When processing, cans containing LMN hardener must be tightly sealed immediately after removal. It should be taken into account that the screening and the etching depth of the cliché roller will influence the printing result.
Ability to overprint:	1-component ink yes, 2-component ink within 24 hours.
Note:	When exposed to greater mechanical and chemical loads or when a greater level of adhesion is required, RDF inks can also be used as 2-component printing inks.
Risk information:	■ In accordance with Directive 91/155/EEC, the "safety data sheet" contains the designation for hazardous material VO and information about protective measures to be taken with regard to processing, storage and waste disposal. The ink shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.
Cleaning:	Our RM cleaning agent is suitable for cleaning the tools and clichés. Use tampon cleaner to clean the tampons.

RDF

A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

Application technology:

If you have any further print and application-related queries, our application technology team will be happy to help.

E-mail: application@tampoprint.de, Fax: +49 7150 928-400

For your request

RDF-NT

FAX +49 7150 928-433

Our range						Your requirements	
Parts no.			**Standard ink shade**	**Container**	**Contents**	**Unit**	**Ink shade**
49	02	01**	Standard ink shade black	5 litres	5 kg		
49	02	02**	Standard ink shade white	5 litres	5 kg		
49	01	01** - 23**	Standard ink shades	1 litre	1 kg		
49	01	50	Clear colour	1 litre	1 kg		
49	01	51	Silver	1 litre	1 kg		
49	01	52	Gold	1 litre	1 kg		
49	01	80	Process yellow Europe shade	1 litre	1 kg		
49	01	81	Process magenta Europe shade	1 litre	1 kg		
49	01	82	Process cyan Europe shade	1 litre	1 kg		
Other ink shades on request							
Parts no.			**Thinner**	**Container**	**kg**		
49	91	07	VDL-RDF	1 litre	approx. 1 kg		
49	91	09	VDL-RDF	5 litres	approx. 5 kg		
49	91	11	VDL-RDF	25 litres	approx. 25 kg		
49	91	08	VDS-RDF	1 litre	approx. 1 kg		
49	91	10	VDS-RDF	5 litres	approx. 5 kg		
49	91	12	VDS-RDF	25 litres	approx. 25 kg		
Parts no.			**Hardener**	**Container**	**kg**		
12	23	01	LMN	0.2 litre	approx. 0.2 kg		
12	55	07	LMN	0.5 litre	approx. 0.5 kg		
12	03	03	LMN	1 litre	approx. 1 kg		
Parts no.			**Cleaning agent**	**Container**	**kg**		
12	04	01	RM	1 litre	approx. 1 kg		
12	94	01	RM	30 litres	approx. 30 kg		
Parts no.			**Tampon cleaner**	**Container**	**kg**		
12	04	04	Tampon cleaner	1 litre	approx. 1 kg		
12	04	05	Tampon cleaner	5 litres	approx. 5 kg		

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RDF

** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

Application data sheet

UV-RDF-NT

UV ink for rotary tampon printing machines, gloss ink

Applications:	UV-RDF is very reactive. Suitable for rapid-running tampon printing systems. Rotary tampon printing, but also suitable for "hermetic" and "open" tampon printing systems.
Materials to be printed:	ABS, rigid PVC, lacquered surface, PETP, PET, polyethylene (pretreated), polypropylene (pretreated), polystyrene, soft PVC.
Characteristics:	Impact resistant, permanently elastic, good coverage, suitable for food wrappings (exterior), suitable for screen printing, abrasion resistant, stackable, flow (good), mechanical resistance.
Resistance:	Against: Alcohol, cleaning agents containing alcohol, chemicals, hand perspiration, light, oils and fats, diluted alkalis, diluted acids, water, weather.
Pretreatment:	Definitely required to guarantee ink adhesion. Ignition, CORONA discharge or plasma process for: Pretreated polypropylene (PP), polyethylene (PE). Surface tension should be at least 52 mN/m with pretreated polypropylene (PP) and 42 mN/m with polyethylene (PE).
Thinner / retarder / hardener / additive:	UV-RDF print additive (thinner) max. 10%. Antistatic additives and lubricants can have a negative effect on the ink adhesion.
Drying:	a) All ink shades can be cured with a medium-pressure mercury vapour lamp of at least 160 W/cm. b) A post-curing phase of approx. 12 hours should be observed. The colour film will then have acquired its end properties.
Curing:	Note: Too low a heat intensity, too high a machine speed, too great an ink thickness will have a negative effect on the curing and adhesion properties.
Storing:	At 21° C at least 12 months (sealed container). Higher temperatures may reduce the storage stability.
Printing consistency:	The UV-RDF is ready for printing. If necessary add max. 10% UV-RDF print additive.
Typographical information:	Should printing disruption occur (corona build-up) = add: 5 to max. 10% UV-RDF print additive. It should be taken into account that the screening and the etching depth of the tampon printing cliché, as well as the form and hardness (Shore) of the tampon and the printing speed of the tampon printing machine and the heat intensity will all influence the printing result.
Ability to overprint:	Possible within the curing period. Intermediate drying is recommended.
Note:	As materials can differ greatly regarding their chemical structure and manufacturing method, a sampling (test print) should always be carried out.
Risk information:	■ In accordance with Directive 91/155/EEC, the "safety data sheet" contains the designation for hazardous material VO and information about protective measures to be taken with regard to processing, storage and waste disposal. The ink shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.
Cleaning:	Our RM cleaning agent is suitable for cleaning the tools and clichés. Use tampon cleaner to clean the tampons.

A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

UV-RDF

Application technology:

If you have any further print and application-related queries, our application technology team will be happy to help.

E-mail: application@tampoprint.de, Fax: +49 7150 928-400

For your request

UV-RDF-NT FAX +49 7150 928-433

Our range						Your requirements	
Parts no.			**Standard ink shade**	**Container**	**Contents**	**Unit**	**Ink shade**
49	03	01** - 23**	Standard ink shades	1 litre	1 kg		
49	03	50	Bronze binder	1 litre	1 kg		
49	03	51	Silver	1 litre	1 kg		
49	03	52	Gold	1 litre	1 kg		
49	03	53	Clear colour	1 litre	1 kg		
49	03	80	Process yellow Europe shade	1 litre	1 kg		
49	03	81	Process magenta Europe shade	1 litre	1 kg		
49	03	82	Process cyan Europe shade	1 litre	1 kg		
Other ink shades on request							
Parts no.			**Additive**	**Container**	**kg**		
49	03	54	UV-RDF print additive	1 litre	approx. 1 kg		
Parts no.			**Cleaning agent**	**Container**	**kg**		
12	04	01	RM	1 litre	approx. 1 kg		
12	94	01	RM	30 litres	approx. 30 kg		
Parts no.			**Tampon cleaner**	**Container**	**kg**		
12	04	04	Tampon cleaner	1 litre	approx. 1 kg		
12	04	05	Tampon cleaner	5 litres	approx. 5 kg		

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UV-RDF

** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

Application data sheet

LOGO-NT 2-component ink, gloss ink

Applications:	The ink type "LOGO", especially suitable for the shock-resistant printing on lacquered golf balls.
Materials to be printed:	Epoxy resins, ABS, acrylic glass, thermoplastics TPE
Characteristics:	Impact resistant, permanently elastic, gloss ink, good coverage, air drying, oven drying, abrasion resistant, suitable for half-tone printing, slow drying, flow (good), mechanical resistance.
Resistance:	Against: Chemicals, hand perspiration, light, diluted alkalis limited, water, weather.
Pretreatment:	-
Thinner / retarder / hardener / additive:	VD thinner slow-drying VD 3 thinner quick-drying Retarder VZ Hardener BH-N
Drying:	After the hardener BH-N is added, chemical-physical drying. Drying time at room temperature (20-25° C) is approx. 15 min. With thermal influence and air circulation approx. 30 sec.
Curing:	At room temperature approx. 5-6 days.
Storing:	At 21° C at least 12 months (sealed container) Higher temperatures may reduce the storage stability
Printing consistency:	4 parts ink "LOGO" : 1 part hardener BH-N Ink ready for printing = add 15-30% thinner VD or VD 3 Pot life of the mixed ink approx. 8 hours.
Typographical information:	Ink type "LOGO" should be processed only with hardener BH-N, otherwise shock-resistance cannot be guaranteed.
Ability to overprint:	-
Note:	Above mentioned characteristics are only achieved after the ink has fully hardened.
Risk information:	■ In accordance with Directive (EC) 1907/2006 the "safety data sheet" contains the designation based on the European Preparation Directive (1999/45/EC) and references regarding safety precautions for processing, storing and disposal. The information mentioned in the safety data sheets refers to the use according to instructions in this data sheet. The ink shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.
Cleaning:	Our RM cleaning agent is suitable for cleaning the tools and clichés. Use tampon cleaner to clean the tampons.

A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

Application technology:

If you have any further print and application-related queries, our application technology team will be happy to help.

E-mail: application@tampoprint.de, Fax: +49 7150 928-400

LOGO

For your request

LOGO-NT FAX +49 7150 928-433

Our range						Your requirements	
Parts no.			**Standard ink shade**	**Container**	**Contents**	**Unit**	**Ink shade**
10	00	01** - 23**	Standard ink shades	1 litre	Density 1,1 – 1,8 kg !		
10	00	51	Silver	1 litre			
10	00	52	Gold	1 litre			
Other ink shades on request							
Parts no.			**Thinner**	**Container**	**kg**		
12	01	01	VD	1 litre	approx. 1 kg		
12	01	04	VD 3	1 litre	approx. 1 kg		
Parts no.			**Retarder**	**Container**	**kg**		
12	02	01	VZ	1 litre	approx. 1 kg		
Parts no.			**Hardener**	**Container**	**kg**		
12	23	08	BH-N	0,5 litre	approx. 0,5 kg		
12	03	08	BH-N	1 litre	ca. 1 kg		
Parts no.			**Cleaning agent**	**Container**	**kg**		
12	04	01	RM	1 litre	approx. 1 kg		
12	94	01	RM	30 litre	approx. 30 kg		
Parts no.			**Tampon cleaner**	**Container**	**kg**		
12	04	04	Tampon cleaner	1 litre	approx. 1 kg		
12	04	05	Tampon cleaner	5 litre	approx. 5 kg		

Contact us:
Sales Tampon printing ink.
E-Mail:colour@tampoprint.de, Fax: +49 7150 928-433
under: http://www.tampoprint.de (Enquiry form)

** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

LOGO

Ink tubes

Extended product range: 200 ml ink tube

In order to adjust the diversity of TAMPOPRINT® products and their fields of application to the needs of the market, we offer to you the ink types "K", "O" and "R" in the new **200 ml ink tube** which stands out thanks to further features:

- ✔ ideal for low ink dosing
- ✔ practical and clean handling
- ✔ low remaining quantities
- ✔ low disposal costs
- ✔ environmental-friendly packaging

Ink type "K"	Ink type "O"	Ink type "R"
Parts no.: TUBE 13 27 (01-23)	**Parts no.: TUBE 10 14 (01-23)**	**Parts no.: TUBE 10 17 (01-23)**
Ink shades: 01 - 23	Ink shades: 01 - 23	Ink shades: 01 - 23
Field of application: For fast running machines up to 4.000 cycles/h, packaging in general (external), toy industry	Field of application: food packaging, advertising industry, toy industry, pharmaceutical packagings	Field of application: Ideal for highly stressed surfaces, automotive industry, white goods, technical plastic parts
1- and 2-component ink, glossy ink (free from cyclohexanone and arenes)	1-component ink, glossy ink	1- and 2-component ink, glossy ink
"hermetic" + "open" tampon printing, rotary tampon printing	"hermetic" + "open" tampon printing, rotary tampon printing	"hermetic" + "open" tampon printing, rotary tampon printing
Thinner: VDL-K Parts no. 12 01 11 1 L VDS-K Parts no. 12 01 12 1 L	Thinner: VDL 380 Parts no. 12 01 05 1 L VDL 1015 Parts no. 12 01 07 1 L VDS 1015 Parts no. 12 01 08 1 L	Thinner: VDL 380 Parts no. 12 01 05 1 L VDL 1015 Parts no. 12 01 07 1 L VDS 1015 Parts no. 12 01 08 1 L
Retarder: VZ-K Parts no. 12 02 08 1 L	Retarder: VZ 380 Parts no. 12 02 06 1 L	Retarder: VZ 380 Parts no. 12 02 06 1 L
Hardener: LMN-K Parts no. 12 53 07 0,2 L	Bonding agent: P-O Parts no. 10 14 85 0,5 L	Hardener: LMN Parts no. 12 23 01 0,2 L LMN Parts no. 12 55 07 0,5 L LMN Parts no. 12 03 03 1 L LMN1 Parts no. 12 53 02 0,5 L

Colour card for standard ink shades:

01		11		21			
02		12		22			
03		13		23			
04		14					
05		15					
06		16					
07		17					
08		18					
09		19					
10		20					

Available as of October 2009 !

For your request

Ink tubes

FAX +49 7150 928-433

Our range						Your requirements	
Parts no.			**Standard ink shade**	**Container**	**Contents**	**Unit**	**Ink shade**
TUBE	13 27	01** - 23**	Ink type K Standard ink shades	200 ml	Density 0,2 – 0,36 kg		
TUBE	10 14	01** - 23**	Ink type O Standard ink shades	200 ml			
TUBE	10 17	01** - 23**	Ink type R Standard ink shades	200 ml			
Parts no.			**Thinner**	**Container**	**kg**		
12	01	11	VDL-K	1 litre	approx. 1 kg		
12	01	12	VDS-K	1 litre	approx. 1 kg		
12	01	07	VDL 1015	1 litre	approx. 1 kg		
12	01	08	VDS 1015	1 litre	approx. 1 kg		
12	01	05	VDL 380	1 litre	approx. 1 kg		
Parts no.			**Retarder**	**Container**	**kg**		
12	02	08	VZ-K	1 litre	approx. 1 kg		
12	02	06	VZ 380	1 litre	approx. 1 kg		
Parts no.			**Hardener**	**Container**	**kg**		
12	53	07	LMN-K	0,2 litre	approx. 0,2 kg		
12	23	01	LMN	0,2 litre	approx. 0,2 kg		
12	55	07	LMN	0,5 litre	approx. 0,5 kg		
12	03	03	LMN	1 litre	approx. 1 kg		
12	53	02	LMN1	0,5 litre	approx. 0,5 kg		
Parts no.			**Bonding agent**	**Container**	**kg**		
10	14	85	PP-O	0,5 litre	approx. 0,5 kg		
Parts no.			**Cleaning agent**	**Container**	**kg**		
12	04	01	RM	1 litre	approx. 1 kg		
12	94	01	RM	30 litre	approx. 30 kg		
Parts no.			**Tampon cleaner**	**Container**	**kg**		
12	04	04	Tampon cleaner	1 litre	approx. 1 kg		
12	04	05	Tampon cleaner	5 litre	approx. 5 kg		

Contact us:
Sales Tampon printing ink.
E-Mail:colour@tampoprint.de, Fax: +49 7150 928-433
under: http://www.tampoprint.de (Enquiry form)

** To determine the parts number, please add **the two-digit number** of the respective **standard ink shade (see ink shade card)** to the **parts number** and state the complete number in the **order**.

Solvent tampon printing inks

Available as 1- or 2-component ink.

UV tampon printing inks

These are 1-component inks.

Solvent inks	UV inks
Additives	Additive
Pigments / Extenders	Pigments / Extenders
Solvent	Monumers
Hardener	Photoinitiators
Resins	Prepolymer

NT

All ink types are manufactured from scratch as NT (non-toxic).

1-Component ink

The 1-component inks dry physically through evaporation of solvents. This process can be supported with hot air.

2-Component ink

After the ink has been transferred and the physical drying has taken place, a chemical cross linking reaction takes place between the binder and hardener.

The maximum processing time (pot life) is limited by the addition of hardener (the pot life varies depending on the ink type and hardener). After this you may have to deal with reduced adhesion and resistance even if the ink still appears fluid and ready for use.

Consistency

The TAMPOPRINT® ink types are not ready for printing but must be mixed to the correct consistency, depending on the print image, using the thinners (solvent) indicated on the relevant data sheets for the individual ink types.

Print additives

Additives are added to UV tampon printing inks in small quantities to achieve or improve certain characteristics.
In other words, additives should have a positive influence on

- the manufacturing process
- storage
- processing
- optical characteristic

Thinner (solvent)

The addition of a "thinner" does not just influence the viscosity, flow capacity and ink dispensing behaviour of the tampon printing ink from the tampon to the workpiece, but it also has a very particular influence on the drying speed. In addition to universal thinners, "quick" and "slow" thinners are also available.

Retarder (solvent)

is a very slow thinner used to slow down the drying time without having a negative effect on the ink viscosity. It may also be necessary to add retarder when printing large print images or when using slow tampon printing machines.

Coupling agent (primer)

In order to achieve ink adhesion on polyolefines such as PE (polyethylene) and PP (polypropylene), the workpiece surface must be pretreated prior to printing commencing. This can be carried out with corona, gas or plasma pretreatment stations on your tampon printing machine.
"PP" or "PPO" coupling agent can be used for PP (polypropylene) instead of one of the above processes.

Levelling agent

The levelling agent reduces the surface tension of the tampon printing ink. The additional anti-foaming effect allows large single colour print (images) in particular to appear homogeneous (e.g. with orange-peel skin effects).
In order to avoid adhesion problems when printing "ink on ink", no more than 1% levelling agent should be added.

Hardener

Hardener is added to achieve a better consistency of 2-component inks. This means, the hardener will react with the remaining resin bonding agent of the printing ink and will create a cross linking of the printing ink or the ink film on the workpiece.

Waste disposal

Ink residues must be disposed of in hazardous waste.

Cleaning

The clichés and tools can be cleaned of all ink types using our "RM cleaning agent" or our cliché spray.

Pretreatment methods

- ionisation: For all print materials. Causes the discharge of the surface tension.
- gas flame pretreatment
- plasma pretreatment
- corona pretreatment

Aftertreatment methods

- thermodiffusion shock drying
- flame drying
- hot-air nozzle drying
- infrared drying
- oven drying
- low pressure mercury lamp (UV lamp)

Our ink samples for your test print

Please note that for white, translucent or crystal clear surface colours normally no approval samples are necessary. Based on our experience there will be only very slight falsifications of the ink shade.
For all other surface colours of your print samples we recommend a test print. Alternatively you can make use of our quotation for approval samples incl. ink sample.

In order to carry out the sampling for your workpiece

we need the following data

- required ink shade, e.g.: "RAL 6011"
- required ink type, e.g.: "R"
- material of your printing part, alternatively you canalso place one printing part at our disposal

You will then receive an individual offer

which includes:

- a description of the ink type according to your requirements
- a description of the required ink shade
- 250 ml sample of the ink
- cliché production for proofing the printing on your workpiece

In the case of coloured printing surfaces, a colour test will be blended by our ink laboratory, to give you the best possible ink shade result.
We can send your sampling to you by post or it can be delivered by a member of our sales team.

Minimum quantity surcharge

Depending on the ink type different surcharges for minimum quantities will be charged (see below).

Your full price is calculated from:
Basic ink type price + minimum quantity supplement

Ink type HS, K, N, O, R, Q

graded according to:

1-4 l	with one-off minimum quantity surcharge
5-9 l	with one-off minimum quantity surcharge
> 10 l	no surcharge

Ink type H, L, M, S, TH, TP-PP

graded according to:

5-9 l	with one-off minimum quantity surcharge (min. 5 l)
> 10 l	no surcharge

Ink type LC, RDF, UV-RDF

graded according to:

5-9 kg	with one-off minimum quantity surcharge (min. 5 kg)
> 10 kg	no surcharge

Ink type B, B/GL, E, F, G, GU, GU-N, P, TP-CD, W, LOGO

graded according to:

1-15 l	minimum quantity surcharge per litre
> 16 l	no surcharge

Prices available upon request.

ORIGINAL TAMPOPRINT

Sales of tampon printing ink
E-Mail: colour@tampoprint.de
Fax: +49 7150 928-433

Sales of tampon printing cliché + Pre-press
E-Mail: klischee@tampoprint.de
Fax: +49 7150 928-402

Sales of tampons
E-Mail: tampon@tampoprint.de
Fax: +49 7150 928-425

Sales of spare parts + standard machine accessories (optional equipment)
E-Mail: salesparts@tampoprint.de
Day and night service:
Phone (AB) +49 7150 928-127
Spare parts: Fax +49 7150 928-425
Accessories: Fax +49 7150 928-434
Please have your customer and machine or order number to hand.

Sales of special accessories + special productions
E-Mail: vkz@tampoprint.de
Fax: +49 7150 928-434
Please have your customer and machine or order number to hand.

Application engineering + sampling
E-Mail: application@tampoprint.de
Fax: +49 7150 928-400
E-Mail: laserapplication@tampoprint.de
Fax: +49 7150 928-431

Service + Maintenance for our installations around the world
Tel.: Tel.: +49 7150 928-213, (-133)
E-Mail: service@tampoprint.de
Fax +49 7150 928-420
E-Mail laserservice@tampoprint.de
Fax: +49 7150 928-212
E-Mail: dmdservice@tampoprint.de
Fax: +49 7150 928-431

"Basic principles of tampon printing" training
E-Mail: seminar@tampoprint.de
Fax: +49 7150 928-420

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TAMPOPRINT® IBERIA S.A.U. / Spain
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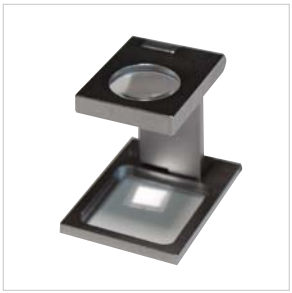
Fax: +34 93 247 1500

Cleaning tissues

Antistatic tissue

Hand-held magnifying glass


Magnifying glass

Metering container

Safety metering container

Spraying bottle

Latex gloves

Brush large

Tweezers

Red martin brush

Spatula

Oil lapping stones

Paper cups

Metal mixing spatula

Paper for printing off

VISCO measuring set

Protective hand cream

Adhesive foil

Adhesive tape

ORIGINAL TAMPOPRINT®

Ink/doctoring cup 2-colour

Ink/doctoring cup 3-colour

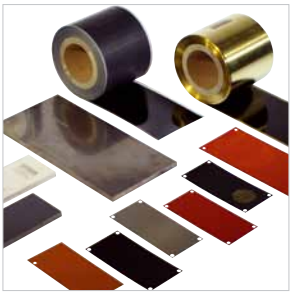
Thrust collar adapter for Ink/doctoring cup

ClipLock® Ink/doctoring cup with lid

Thrust collar 2-colour Ø 30 mm

Thrust collar 2-colour Ø 60 mm

Jig with component


Range of tampon printing clichés

Hardener "BH"

Levelling agent "VL"

Test inks for surface tension

Online tampon data base

Pretreatment Ionisation

Plasma pretreatment

Rotary index table

Modular Service-Center

Thinner metering system "hermetic"

Spray washing device

Ink pump

"AL" cross table

ORIGINAL

TAMPOPRINT®

Dealer:

AMTEC

Distrubted by:
AMTEC - Applied Mfg. Technologies, Inc.
1464 N. Hundley Street, Anaheim, CA 92806
www.amtecinc.com; E-mail: sales @amtecinc.com
Tel: 714-360-9530; 888-634-1143; Fax: 714-630-9531

ORIGINAL

TAMPOPRINT®

The information in our ink catalogue is based on our current level of technical knowledge and experience. Due to the wide range of possible influences during processing and use, this does not release operators from the responsibility of carrying out their own checks. A legally binding guarantee of certain characteristics or suitability for a particular application cannot be assumed from our specifications.

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CPWebegrafik 7/2009