



TTC
excellence
in colour

1949

www.ttc-colours.com

About Us

HISTORY, HERITAGE, EXPERIENCE



We make and supply colour for almost any application: from paints to paper, inks to foam, plastics, seed coatings and of course textile printing.

TTC is the leading UK manufacturer of colour, based beside the River Lagan in Belfast, Northern Ireland. We started life in 1949 when the Tennants Group started the company. Since then we have been producing a wide range of dispersions tailored to optimise their suitability to a range of applications. In 2016 TTC acquired Northwest Dispersions Ltd and also incorporated the business of Tennants Inks and Coatings Ltd, thus adding solvent, plasticiser and varnish products to our portfolio.

The Tennants Consolidated Group is one of the largest privately owned chemical groups in Europe. It was started in 1797 by the famous Glaswegian entrepreneur, Sir Charles Tennant, who also founded the United Alkali Company, one of the forerunners of Imperial Chemical Industries (I.C.I.).

We pride ourselves on our ability and willingness to work with companies to supply high quality products tailored to their needs and also developing lasting relationships with our customers.

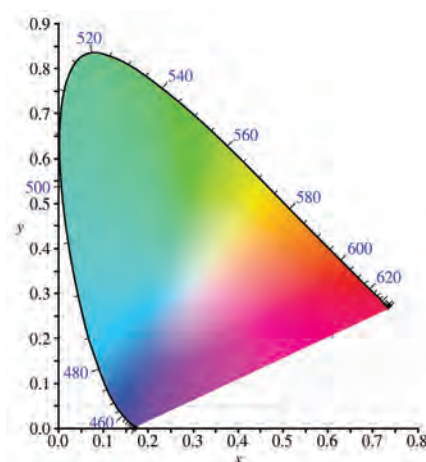
Legislation and environmental issues are central to all chemical activities and we make our responsibilities in this area core to all the products we offer. Regulatory compliance is critical to our product offering. We not only keep up to date with the issues affecting our manufacturing operations but also those that impact our customers.

Our technical team has a wealth of experience in colour science and formulation expertise; this coupled with our capacity to manufacture product batches from 30 kg to 25 tonnes allows us to provide an unparalleled service.

We can advise on the optimum colorant to use and create a customised product for you.

We export to over 50 countries world-wide from our UK bases.

TTC Ltd in Belfast is in a Joint Venture Agreement with Asahi Songwon Colors Limited in Ahmedabad, India for the construction and operation of a Pigment Synthesis Plant to manufacture a range of Azo Pigments.



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Meet the Team



TIM GLENN / MANAGING DIRECTOR

Tim is a Chartered Accountant with over 10 years experience at Board level in industry following his responsibilities as Associate Director with one of the Big 4 Accounting firms.

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CHRISTINE WILSON / GENERAL MANAGER

Christine is responsible for all operations; production, technical, regulatory compliance, health & safety. With more than 25 years' experience, her speciality is dye and pigment dispersions.

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RICHARD AGNEW / OPERATIONS MANAGER

With over 30 years as a Chartered Chemical Engineer, Richard is responsible for our regulatory activity including REACH. He also takes care of Engineering and Capital projects.

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STUART DOUGLAS / COMMERCIAL MANAGER

Stuart started with TTC in 2018 as head of sales. He brings over 20 years of commercial/technical sales experience.

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SANDRA MONTGOMERY / INTERNAL SALES MANAGER

Sandra is responsible for the internal sales and customer services team and is the main point of contact for our customers, agents and distributors. She has been with TTC for 26 years.

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STEPHEN McMAHON / TECHNICAL MANAGER

Stephen is a qualified chemist and is responsible for all product development. He has 24 years experience in TTC.

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BRIAN BEDDIS / SALES MANAGER

Brian is responsible for UK & European direct Sales. He has worked for the Tennants Group for over 40 years in manufacturing and sales.

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NICOLE / CUSTOMER SERVICE

Originally from Germany, Nicole has been living in Northern Ireland for the past 14 years. Nicole brings a wealth of experience to the TTC team. Your orders are in safe hands.

sales@ttc-colours.com

Water Based Pigment Dispersions



Aquarine

PIGMENT DISPERSIONS FOR TEXTILE PRINTING

The AQUARINE dispersions are a range of fine aqueous 'resin free' pigment dispersions ideal for textile print systems and all water based systems.

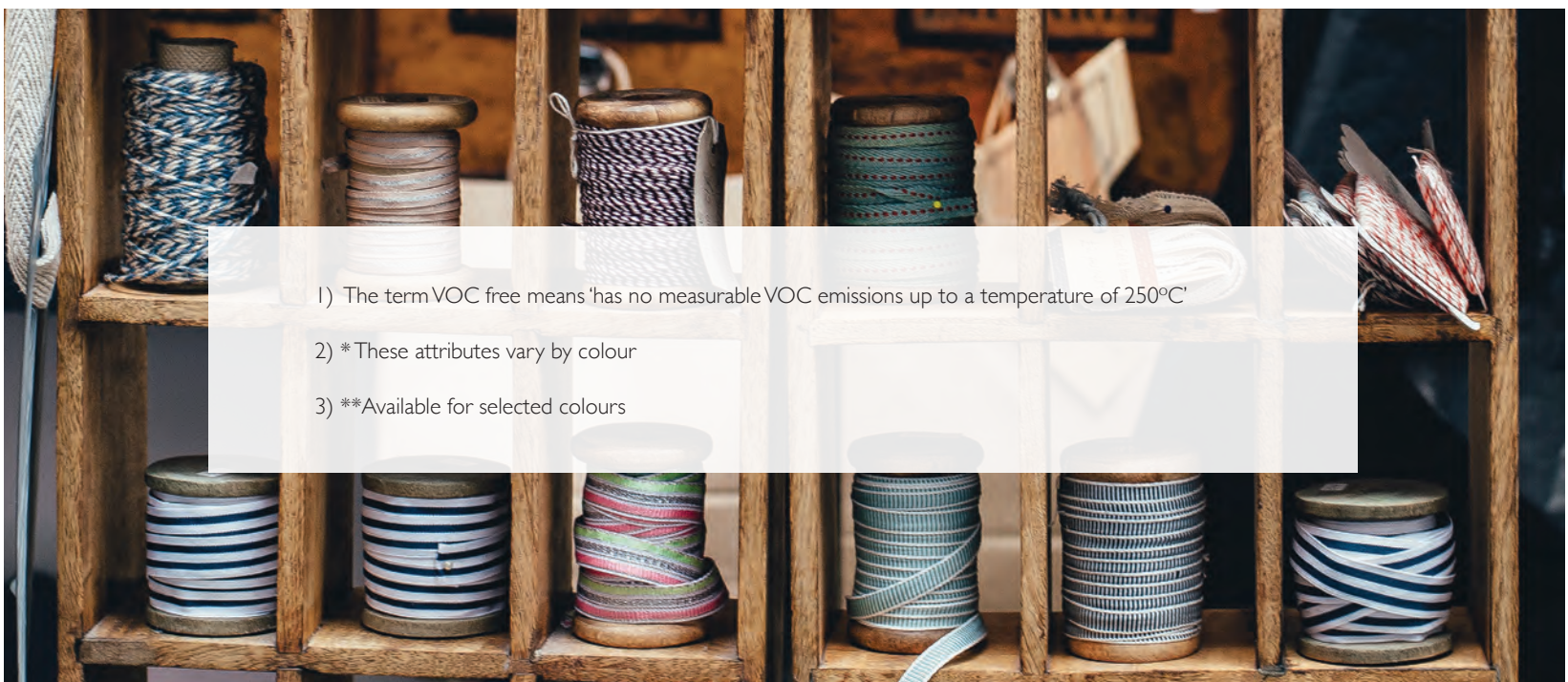
TTC offers a full range of products including common industry standards.

The AQUARINE range offers

- APEO (Alkyl Phenyl Ethoxylate) free
- VOC free - see below: 1)
- Low SVOC - see below: 2)
- Formaldehyde free (with the exception of fluorescent colours)
- Excellent lightfastness
- High Reproducibility batch to batch
- High resistance to flocculation in aqueous print systems
- High resistance to settlement
- Oeko-tex compliant - see below: 2)
- GOTS compliant products available **
- Bluesign compliant products available **
- Inditex compliant products available **

The colours exhibited are our core products but many others are available.













Additionally if special shades, concentrations or blends are needed please contact us.



- 1) The term VOC free means 'has no measurable VOC emissions up to a temperature of 250°C'
- 2) *These attributes vary by colour
- 3) **Available for selected colours















Aquarine

PIGMENT DISPERSIONS FOR TEXTILE PRINTING

	Product Name	Colour Index	Light Fastness		Wash Fastness	Dry Rub	Wet Rub	Dry Clean		Heat Stability	Stability of Discharge		PVC Coating
			3% depth	0.75% depth				3% Depth	0.75% Depth		Decrolin	Rongalit	
	Yellow 3G	Yellow 17	6-7	5	5	4	4	4-5	4	4-5	S	S	4-5
	Yellow 2G	Yellow 14	5-6	3	5	4	4	3	1-2	4-5	S	S	3-4
	Yellow HPP	Yellow 110	7-8	6-7	5	4	4	5	4-5	4-5	S	S	5
	Yellow R	Yellow 83	7-8	6-7	5	4	4	5	4-5	4-5	S	S	5
	Orange G	Orange 43	7-8	7-8	5	4	4	5	4-5	4-5	S	S	5
	Orange O	Orange 34 (Y)	6	4-5	5	4-5	4	4	3	4-5	S	NS	3-4
	Orange F2R	Orange 34 (R)	6	4	5	4	4	4-5	2-3	4-5	S	NS	4
	Scarlet YD	Scarlet YD	6	4-5	4-5	3-4	3-4	4-5	3	4	S	NS	3-4
	Scarlet G	Red 112	7-8	6-7	4-5	3-4	3-4	1-2	NS	4	NS	NS	1-2
	Scarlet R	Red 2	6-7	4	4-5	3-4	3-4	1	NS	3	NS	NS	1-2
	Blend	Scarlet H742E	7-8	7	5	4	3-4	4-5	4	4	S	S	5
	Blend	Red R (New)	5-6	3-4	4-5	4	3-4	1	NS	4	NS	NS	2







Aquarine

PIGMENT DISPERSIONS FOR TEXTILE PRINTING

	Product Name	Colour Index	Light Fastness		Wash Fastness	Dry Rub	Wet Rub	Dry Clean		Heat Stability	Stability of Discharge		PVC Coating
			3% depth	0.75% depth				3% Depth	0.75% Depth		Decrolin	Rongalit	
	Red BD	Red 210	5-6	4	5	4	3-4	4	4	4	NS	NS	3
	Red FK	Red 5	7	6	5	4	3-4	3-4	2-3	4	NS	NS	2-3
	Red 5R	Red 170	6-7	5	4-5	4	3-4	4	3-4	4	S	NS	4
	Red HPP-2T	Red 254	7-8	7-8	4-5	4	3-4	4-5	4-5	4-5	S	S	5
	Red KBB	Red 146	6-7	5	5	4	3-4	4	3-4	4	S	NS	3-4
	Rubine DC	Red 184	5-6	4	5	4	3-4	3-4	3	4	NS	NS	3
	Bordeaux RS	Red 12	7	5-6	4-5	3	3	I	NS	3-4	NS	NS	I
	Red Violet	Blend	5	3	4-5	3-4	3-4	2-3	1-2	4	S	S	1-2
	Fuchsia B	Red 122	7-8	7	5	4	4	5	4-5	4-5	S	S	5
	Pink 3B	Violet 19 (Y)	7-8	7	5	4	4	5	4	4	S	S	5
	Blue 3G	Blue 15.3	7-8	7-8	5	4	4	5	4	4	S	S	5
	Blue B	Blue 15.0	7-8	7-8	5	3-4	3-4	4	3	4	S	S	3-4
	Blue RR	Blend	7-8	7-8	5	3-4	3-4	4	3-4	4	S	S	4-5
	Navy RT	Blend	7-8	7-8	5	3-4	3-4	4	2-3	4	S	S	3-4
	Blue POZ 4R	Blue 60	7-8	7-8	5	3-4	3-4	4	3	4	S	S	3-4

Aquarine

PIGMENT DISPERSIONS FOR TEXTILE PRINTING

	Product Name	Colour Index	Light Fastness		Wash Fastness	Dry Rub	Wet Rub	Dry Clean		Heat Stability	Stability of Discharge		PVC Coating
			3% depth	0.75% depth				3% Depth	0.75% Depth		Decrolin	Rongalit	
	Navy N	Blend	7-8	7-8	5	3-4	3-4	4-5	2-3	4	S	S	3-4
	Violet B	Violet 23	7-8	7-8	5	3-4	3-4	4-5	4	4-5	S	S	4-5
	Green GL/G-CH	Green 7	7-8	7-8	5	4	4	4-5	4-5	4	S	S	5
	Brown 4W	Brown 22	7	5-6	5	3-4	3-4	4	3-4	4-5	S	S	3
	Brown CW	Blend	7-8	6-7	5	4	3-4	4	3-4	4	NS	NS	4
	Brown TW502	Blend	7	6	5	4	3-4	4-5	3-4	4-5	S	S	3-4
	Black	Black 7	7-8	7-8	5	4	3	5	4-5	4-5	S	S	5
	Grey BN	Blend	7-8	7-8	5	4	3	5	4-5	4-5	S	S	5
	Fluorescent Yellow		2-3		3-4			4-5					NS
	Fluorescent Orange		2		3			4-5					NS
	Fluorescent Pink		2		2-3			4					NS
	Fluorescent Magenta		1-2		3-4			3					NS
	Fluorescent Violet		1-2		3			4					NS
	Fluorescent Green		2-3		3			4					NS

Aquarine

GARMENT DYEING



AQUARINE

GARMENT DYEING

TTC Ltd Aquarine Garment Dyeing range is a range of colour in the form of water based pigment dispersions. These high quality pigment dispersions are specially formulated for Garment Dyeing using pigment dispersions rather than traditional dyes in combination with the customers dyeing system.

Pigment dyeing consists of three core steps, cationisation of the fabric, pigment exhaustion on the fabric and the binder application.

Pigment dyeing offers several core advantages:

1. It is applicable to a wide range of textiles
2. The process of pigment dyeing can be relatively cheap
3. The process chemicals are less toxic, more environmentally friendly and less polluting



Aquarine

GARMENT DYEING

	Item #	Product Family	TTC Product Name	Colour Index #	Pigment %	Light Fastness
	PY11AQGD1T	Aquarine GD	Yellow R GD	Yellow 83	33	7 - 8
	PB10AQGD1T	Aquarine GD	Blue BP-MOD GD	Blue 15.0	45	7 - 8
	PB26AQGD1T	Aquarine GD	Navy GD	Blend	36	7 - 8
	PR13AQGD1T	Aquarine GD	Scarlet G GD	Red 112	34	7 - 8
	PR15AQDG1T	Aquarine GD	Red BD GD	Red 210	35	5 - 6
	PR19AQGD1T	Aquarine GD	Red Violet GD	Red 31	17.6	7 - 8
	PG28AQGD1T	Aquarine GD	Green GD	Green 7	50	7 - 8
	PV10AQGD1T	Aquarine GD	Violet GD	Violet 23	30	7 - 8
	PK10AQGD1T	Aquarine GD	Black GD	Black 7	40	7 - 8

% Values are typical

Above is our standard range of colour dispersions per colour index. Other colours may be possible and we would encourage contact with our sales team to discuss needs and commercial viability. Various packing options are available from 30 Kg tubs to IBC (1,000 kgs).

This information is furnished without warranty as the performance of the finished product is a function of many variables outside our control. It is the customers responsibility to test and confirm suitability for the end application. Samples of our Aquarine Garment Dyeing range are available for customer evaluation, upon request.

Aquarine, GOTS

GOTS REGULATED COLOURANTS FROM OUR AQUARINE RANGE



TTC is proud to announce that many of the company's Aquarine products have received approval from the Soil Association as being in compliance with the Global Organic Textile Standard (GOTS).

This certification underlines TTC's commitment to manufacturing and supplying safe high quality materials for our customers.

Blue 3G
PB15.3

Grey BN
Blend

Yellow G-P
PY1

Yellow 3G
PY17

Blue RN
Blend

Black TK
PK7

Scarlet H742E
PR123

Yellow R 25%
PY83

Blue RR
Blend

Bordeaux EF-RS
PR12

Fuchsia B
PR122

Orange G
PO43

Yellow KG
PY155

Navy RT
Blend

Violet B
PV23

Pink 3B-EF
PV19

Scarlet YD

Yellow 2G
PY14

Blue B
PB15.0

Violet R
PV23 Mod

Red 5R
PR170

Red Bez-2T
Blend

Brown TW502
Blend

Navy N
Blend

Ozone Stable Blue
Blue 60

Red BD P
PR210

Red 290-IT
Blend







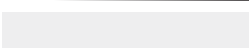

Brown RB
Blend

Aquarine SC

A RANGE OF COLOURANTS FOR SEED COATINGS

The Aquarine SC range are high pigment content water-based dispersions for the colouration of seeds. As free flowing liquids, they are easy to pump thus facilitating accurate dosing. The special formulation is suitable for incorporation with pesticide formulations normally used in seed coating products. A humectant (propylene glycol) is included to prevent drying out allowing for easy wash down of equipment.

No APEO (alkyl phenol ethoxylate) is used in the manufacture of these products.

	Product	Colour Index #	Pigment Content	Typical Density g/cm ³
	Red SC-R48:2*	C.I. 15865:2 Red 48.2	35%	1.17
	Red SC-R112*	C.I. 12370 Red 112	40%	1.17
	Yellow SC-Y1*	C.I. 11680 Yellow 1	45%	1.18
	Green SC-G7*	C.I. 74260 Green 7	40%	1.29
	Blue SC-B15:3*	C.I. 74160 Blue 15.3	40%	1.20
	Violet SC-V23*	C.I. 51319 Violet 23	30%	1.08
	White SC-6A	C.I. 77891 White 6	60%	1.82
	Black SC-7A	C.I. 77266 Black 7	38%	1.27

*Compliant with EPA 40 CFR § 180.920 *Inert ingredients used preharvest; exemptions from the requirement of a tolerance.*

Additional specifications applicable to all products:

- Viscosity: 200 - 2000 centipoise (mPa.s)
- Batch to batch shade consistency: < DE 1.0, cmc D65
- pH 6.0 to 8.5
- Shelf life: 1 year minimum

In practice will remain stable for considerably longer if kept in sealed containers under moderate conditions.

It is the responsibility of the user to test the suitability of this product in their application to ensure compatibility prior to commitment to bulk processing.

Additional colour index products are available for seed applications where EPA compliance isn't required.

Samples of these and any other TTC products are available for evaluation.

Aquaprint Tint

PIGMENT DISPERSIONS FOR WATER BASED PAINT



The AQUAPRINT TINT dispersions are a range of fine aqueous 'binder free' pigment dispersions ideal for most aqueous and decorative paint systems.

Tennants offers a full range of products including common industry standards as well as many specialist colours and HPP products.

The AQUAPRINT TINT range offers

- ~ High levels of flocculation resistance in aqueous interior paint systems
- ~ Good resistance to settlement
- ~ Excellent Lightfastness
- ~ VOC Free (1)
- ~ Ecolabel compliant for SVOC content (2)
- ~ APEO (Alkyl Phenyl Ethoxylate) free
- ~ Formaldehyde Free
- ~ Toy regulation compliant products available, EN71.3, EN71.7



The colours exhibited are our standard products.

Additionally if special shades, concentrations or blends are needed please contact us.








































This information is furnished without warranty as the performance of the finished coating is a function of many variables outside our control. Samples of AQUAPRINT TINT dispersions are available for customer evaluation.

1) The term VOC is defined in EU Ecolabel.

2) SVOC content complies with the EU Ecolabel if used at less than 30% of the finished coating.

Aquaprint Tint

PIGMENT DISPERSIONS FOR WATER BASED PAINT

	Item #	Product Range	Product Name	Colour Index #	Contains Resin	% Pigment (Typical)	% Solids (Typical)	Applications			Light Fastness
								Coating	Ink	Paint	
	PT11WH12T	Aquaprint Tint	White JN-12T	TiO2	No	60	61	X		X	8
	PY16AT4T	Aquaprint Tint	Yellow 10G-4T	Yellow 3	No	50	57	X		X	6
	PY15AT15T	Aquaprint Tint	Yellow G-15T	Yellow 1	No	50	56	X		X	6 - 7
	PY57AT11T	Aquaprint Tint	Yellow 5GT-11T	Yellow 74 Trans	No	40	47	X		X	7
	PY17AT19T	Aquaprint Tint	Yellow 5GO-19T	Yellow 74 Opaque	No	42	47	X		X	7
	PY17AT10T	Aquaprint Tint	Yellow 5GO-10T	Yellow 74 Opaque	No	36	45	X		X	7
	PY155AT2T	Aquaprint Tint	Yellow KG-2T	Yellow 155	No	34	39	X		X	8
	PY53AT4T	Aquaprint Tint	Yellow IO-4T	Yellow 42	No	57	65	X		X	8
	PY11AT4T	Aquaprint Tint	Yellow R-4T	Yellow 83	No	33	40	X		X	7
	PY110AT1T	Aquaprint Tint	Yellow HPP-1T	Yellow 110	No	35	44	X		X	8
	PO16AT5T	Aquaprint Tint	Orange R-5T	Orange 5	No	50	58	X		X	6 - 7
	PO16AT8T	Aquaprint Tint	Orange R-8T	Orange 5	No	39	46	X		X	6 - 7
	PO15AT2T	Aquaprint Tint	Orange G-2T	Orange 43	No	20	25	X		X	7 - 8
	PO10AT8T	Aquaprint Tint	Orange O-8T	Orange 34	No	40	45	X		X	5 - 6
	PO10AT7T	Aquaprint Tint	Orange O-7T	Orange 34	No	33	40	X		X	5 - 6
	PR16AT2T	Aquaprint Tint	Scarlet R-2T	Red 2	No	35	41	X		X	6 - 7
	PR13AT18T	Aquaprint Tint	Scarlet G-18T	Red 112	No	50	55	X		X	6 - 7
	PR13AT20T	Aquaprint Tint	Scarlet G-20T	Red 112	No	45	50	X		X	6 - 7
	PR13AT3T	Aquaprint Tint	Scarlet G-3T	Red 112	No	40	47	X		X	6 - 7
	PR13AT6T	Aquaprint Tint	Scarlet G-6T	Red 112	No	34	40	X		X	6 - 7
	PR33AT2T	Aquaprint Tint	Red 3B-2T	Red 146	No	38	43	X		X	6
	PR10AT1T	Aquaprint Tint	Red 5R-1T	Red 170	No	30	35	X		X	6 - 7
	PR254AT3T	Aquaprint Tint	Red HPP-3T	Red 254	No	40	47	X		X	7 - 8
	PX10AT1T	Aquaprint Tint	Bordeaux-1T	Red 12	No	37.7	44	X		X	7
	PR20AT3T	Aquaprint Tint	Red IO-3T	Red 101	No	50	60	X		X	7 - 8
	PR22AT2T	Aquaprint Tint	Pink 3B-2T	Violet 19 Yellow Shade	No	20	23	X		X	7 - 8
	PP11AT1T	Aquaprint Tint	Fuschsia B-1T	Red 122	No	30	36	X		X	7 - 8
	PB12AT8T	Aquaprint Tint	Blue 3G-8T	Blue 15.3	No	44	54	X		X	7 - 8
	PB12AT11T	Aquaprint Tint	Blue 3G-11T	Blue 15.3	No	40	49	X		X	7 - 8
	PB12AT19T	Aquaprint Tint	Blue 3G-19T	Blue 15.3	No	34	42	X		X	7 - 8
	PB60AT2T	Aquaprint Tint	Blue POZ-2T	Blue 60	No	30	35	X		X	8
	PB10AT17T	Aquaprint Tint	Blue B-17T	Blue 15.0	No	45.5	54	X		X	7 - 8
	PB10AT10T	Aquaprint Tint	Blue B-10T	Blue 15.0	No	40	50	X		X	7 - 8
	PB29AT1T	Aquaprint Tint	Blue BCH-1T	Blue 15.1	No	37	46	X		X	8
	PG28AT19T	Aquaprint Tint	Green G-19T	Green 7	No	50	58	X		X	7 - 8
	PV10AT12T	Aquaprint Tint	Violet B-12T	Violet 23	No	30	40	X		X	7 - 8
	PK12AT3T	Aquaprint Tint	Black TK-3T	Black 7	No	38	46	X		X	8
	PK18AT2T	Aquaprint Tint	Black DP-2T	Black 7	No	36	42	X		X	8
	PK22AT1T	Aquaprint Tint	Black WJ2-1T	Black 7	Yes	32	40	X		X	8

Aquaprint Tint

PIGMENT DISPERSIONS FOR WATER BASED PAINT

EN71.3
COMPLIANT
RANGE



AQUAPRINT TINT

PIGMENT DISPERSIONS FOR WATER BASED PAINT

TTC offer a range of regulatory compliant colour dispersions to suit all arts and craft paints. These standard production 'binder free' pigment dispersions are made to the highest standard for compositional and purity requirements, tested to EN 71.3 regulation and ideal for toys and paints.

The AQUAPRINT TINT range offers

- ~ High levels of flocculation resistance
- ~ Good resistance to settlement
- ~ Excellent Lightfastness
- ~ VOC Free (1)
- ~ Ecolabel compliant for SVOC content (2)
- ~ APEO (Alkyl Phenyl Ethoxylate) free
- ~ Formaldehyde Free




The colours exhibited are our standard colours, additional colours, shades, concentrations and blends are possible, we encourage you to enquire and we can discuss commercial viability to develop.

This information is furnished without warranty as the performance of the finished coating is a function of many variables outside our control. Samples of AQUAPRINT TINT dispersions are available for customer evaluation, upon request.

1) The term VOC is defined in EU Ecolabel.

2) SVOC content complies with the EU Ecolabel if used at less than 30% of the finished coating.

	Item #	Product Range	Product Name	Colour Index #	Contains Resin	% Pigment (Typical)	% Solids (Typical)	Applications			Light Fastness
								Coating	Ink	Paint	
	PT11WH16T	Aquaprint Tint	White TMJN*	White 6	No	60	61	X		X	8
	PT50AT1T	Aquaprint Tint	White TMPS*	White 6	No	60	61	X		X	8
	NWBSW6	Aquaprint Tint	White TMTP	White 6	No	60	61	X		X	8
	PY15AT17T	Aquaprint Tint	Yellow TMG	Yellow 1	No	50	56	X		X	6 - 7
	PY17AT22T	Aquaprint Tint	Yellow TM5GO	Yellow 74 (O)	No	36	45	X		X	7
	PY11AT5T	Aquaprint Tint	Yellow TMR	Yellow 83	No	33	40	X		X	7
	PO10AT9T	Aquaprint Tint	Orange TMO	Orange 34	No	33	40	X		X	5 - 6
	PR13AT35T	Aquaprint Tint	Scarlet TMG	Red 112	No	40	47	X		X	6 - 7
	PP11AT3T	Aquaprint Tint	Fuchsia TM	Red 122	No	30	36	X		X	7 - 8
	PR254AT6T	Aquaprint Tint	Red TMHPP	Red 254	No	40	47	X		X	7 - 8
	PR22AT3T	Aquaprint Tint	Pink TM3B	Violet 19 (Yellow Shade)	No	20	23	X		X	7 - 8
	PV10AT18T	Aquaprint Tint	Violet TMB	Violet 23	No	34	42	X		X	7 - 8
	PB12AT25T	Aquaprint Tint	Blue TM3G	Blue 15.3	No	44	54	X		X	7 - 8
	PG28AT22T	Aquaprint Tint	Green TMG	Green 7	No	50	58	X		X	7 - 8
	PK18AT4T	Aquaprint Tint	Black TMDP	Black 7	No	36	42	X		X	8

Element Limit (ppm)

Aluminium (Al)	300*
Antimony (Sb)	15
Arsenic (As)	1
Barium (Ba)	30
Boron (B)	75
Cadmium (Cd)	1
Chromium (III & VI) (Cr)	5
Chromium (III) (Cr III)	5
Chromium (VI) (Cr VI)	0.05
Cobalt (Co)	5
Copper (Cu)	200
Lead (Pb)	2
Manganese (Mn)	300
Mercury (Hg)	2
Nickel (Ni)	15
Organic Tin	12
Selenium (Se)	10
Strontium (Sr)	300
Tin (Sn)	300
Zinc (Zn)	500

EN71.3 specifies requirements and test methods for the migration of heavy metals and toxic elements such as aluminium, antimony, arsenic, barium, boron, cadmium, Chromium (III), Chromium (VI), cobalt, copper, lead, manganese, mercury, nickel, selenium, strontium, tin, organic tin and zinc. Please reference the limit table (left) in relation to the above dispersions in determining the products suitability in your application to ensure end compliance.

The above products are manufactured as part of our standard production. Raw materials are subject to a careful selection process and manufacturing is monitored by a 'spot testing' programme. Compliance testing against EN71.3 is not routinely carried out for each batch lot.

* the limit for aluminium is 5000 for items PT11WH16T and PT50AT1T

Aquaprint Tint FP

DISPERSIONS FOR FINGER PAINTS

Aquaprint Tint FP is a range of aqueous pigment dispersions for the colouration of Finger Paints and is fully compliant with the latest EN71.7 regulations*.

European Standard EN 71-7 recognises Finger Paints as a special class of children's toy demanding the highest standards in the purity of raw materials and careful selection of safe ingredients.

The Standard considers both the intentional and the foreseeable use of such toys including prolonged skin contact and ingestion.







We routinely test for the proscribed and level-limited impurities as demanded by the Standard *and only use permitted pigments, preservatives, additives and dispersants.*

**Complies with the requirements of the standard when used responsibly at levels up to 3% in Finger Paint formulations.*



Aquaprint Tint FP

DISPERSIONS FOR FINGER PAINTS

	Product Name	Colour Index	Pigment Content*	pH	Viscosity
	Yellow GFP	Yellow I	50.0%	6.0 – 9.5	1,000 – 5,000
	Yellow 5GFP	Yellow 74	39.2%	6.0 – 8.0	100 – 2,000
	Scarlet GFP	Red 112	50.0%	6.0 – 8.0	500 – 4,000
	Violet BFP	Violet 23	30.0%	6.0 – 9.0	100 – 3,000
	Blue BCHFP	Blue 15	40.0%	7.0 – 9.5	1,000 – 5,000
	Green GCHFP	Green 7	50.0%	8.0 – 9.5	500 – 3,000
	Black TKFP	Black 7	34.5%	7.5 – 9.5	100 – 2,000

*The pigment content shown will be typical, not specification. These products are standardised by colour strength and shade against internal Standards to a Delta E of <0.5 (by cmc 2:l D65) for a medium depth of shade.



Aquaprint Cell

PIGMENT DISPERSIONS FOR PAPER

The AQUAPRINT CELL range of dispersions is available in a wide range of formulations to answer the issues of paper making.

Products are available as standard materials or more often as customised dispersions to enhance performance in the customer's specific circumstances. With the complex regulatory framework in place for Food Contact and the growing number of environmental and consumer considerations, TTC works with individual producers to customise cost effective compliant materials to answer their needs.

Some others are also available as cationic versions: G7, Bk7, B15.0, B15.3, R122, Y1, Y83

Paper Applications:

- **White Enhancement - Pulp & Coating**
A range of products are available for use with OBAs to increase whiteness levels
- **High Quality Consumer packaging - Pulp & Coating**
Full colour range of high strength bright pigment dispersions for high quality lightfast papers
- **Decor papers for laminates - Pulp & Printing Inks**
High strength, low foam colours for laminate papers and the inks used for pattern printing
- **Non-Woven Products**
A range of colours for all non-wovens: medical, cleaning, shoe inserts etc...

Products are available to comply with the following Government and Consumer requirements:











- BfR XXXVI Paper and board for food contact
- FDA 21 CFR 176 - 170 and 180 components of paper and paperboard in contact with aqueous and fatty foods
- GB 9685-2016 Chinese Hygiene Standard for Food Containers & Packaging












Consumer Compliance

- Nordic Swan
- Eco label/Flower
- Blue Angel

Aquaprint Cell

PIGMENT DISPERSIONS FOR PAPER

	Product Name	Colour Index	Light Fastness
	Yellow PG	PY1	7-8
	Yellow P2G	PY 14(O)	4-5
	Yellow PR	PY83	6-7
	Yellow PF	PY42	8
	Orange PO	PO34	6
	Scarlet PR	PR2	5-6
	Scarlet PG	PR112	6-7
	Red BBCH	PR146	6
	Rubine PD	PR184	6
	Magenta P	PR81.3	3

	Product Name	Colour Index	Light Fastness
	Pink 3B	PV10	7
	Fuchsia DB	PR122	7
	Violet PB	PV23	6
	Violet PM	PV3	3
	Violet D3B	PV19(B)	7
	Violet RVB	Blend	5
	Blue PB	PB15.0	8
	Blue P3G	PB15.3	8
	Blue Navy	Blend	8
	Green PG-7T	PG-7	8
	Black C-2T	PB-7	8

Aquaprint Cell

PIGMENT DISPERSIONS FOR PAPER

AQUAPRINT CELL

BFR APPROVED PIGMENT DISPERSIONS FOR PAPER

BfR

Recommended
Range

TTC offers a range of pigment dispersions with food contact compliance that are based on pigments and ingredients of the highest purity. Our BfR compliant range is ideal for tinting uncoated and coated paper for packaging papers used in food contact applications.

The range offers many benefits required by a paper mill to deliver a high quality end product for their customers. These benefits have been experienced by paper mills using TTC dispersions first hand:-

- Excellent dispersibility due to fine milling and high quality of dispersion
- Non foaming & shock resistance
- Extremely low levels of residue left on equipment, improved ease for wash down
- Elimination of speckles / comets on the paper leading to an improved end product












Our standard range of dispersions is shown on the following table.

To test, trial and confirm the performance of these dispersions, discuss a current problem/challenge, or request a custom blend, please contact our sales team at sales@ttc-colours.com.



Aquaprint Cell

PIGMENT DISPERSIONS FOR PAPER

	Item #	Product Range	TTC Product Name	Colour Index #	% Pigment (Typical)	Solids % (Typical)	Density g/cm ³ (Typical **)
	PB10CE3T	Aquaprint Cell	Blue PB-3T	Blue 15.0	18	22	1.10 g/cm ³
	PB10CE16T	Aquaprint Cell	Blue PB-16T	Blue 15.0	25	30	1.12 g/cm ³
	PB10CE44T	Aquaprint Cell	Blue PBR	Blue 15.0	16	20	1.10 g/cm ³
	PV14CE5T	Aquaprint Cell	Violet PB-5T	Violet 23	15	18	1.09 g/cm ³
	PV14CE7T	Aquaprint Cell	Violet PB-7T	Violet 23	30	34	1.14 g/cm ³
	PV10CE3T	Aquaprint Cell	Violet BX-3T	Blend (V23/B15)	8	9.5	1.04 g/cm ³
	PB59CE2T	Aquaprint Cell	Violet RX	Blend (V23/B15)	12	14.6	1.04 g/cm ³
	PK36CE1T	Aquaprint Cell	Black 3RR	Black 3RR	35	38.4	1.2 g/cm ³
	PK12CE3T	Aquaprint Cell	Black CCTK (foamy)	Black CCTK	36	39	1.27 g/cm ³

** Density. Not part of the product specification, these products are standardised by colour strength against standard.

BfR Recommendation XXXVI Paper and Board for Food Contact as of 01.06.2019

All components of the above mentioned product, except the colourant, are listed in BfR XXXVI. Colourants are not listed specifically in this recommendation, but are covered by the statement that there must be no migration of colourants to the foodstuff. Tennants Textile Colours Limited does not conduct migration tests.

Note BfR XXXVI makes the following comments about substances contained in this product:

- 1,2-Benzisothiazolin-3-one - no more than 10 µg/dm² of this substance must be detectable in the extract of the finished product.
- Zinc pyrithione, max. 17 µg/dm².
- 2-Octyl-2H-isothiazol-3-one. No more than 5 µg/dm of this substance must be detectable in the extract of the finished product.



The AQUAPRINT FLEX dispersions are a range of fine aqueous pigment dispersion ideal for most aqueous ink systems especially flexography.

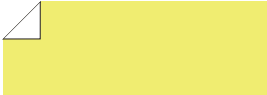




We offer a full range of products including the common industry standard for Process sets as well as speciality spot colours such as Red 146, Red 170, Red 184 and Red 254.

The Flex range is available in two versions - water based ammonia (NH) and fixed alkali (FA) stabilised acrylic resin concentrates.

The AQUAPRINT FLEX range:

- High flocculation resistance
- High Gloss
- Excellent resistance to settlement
- Excellent lightfastness
- APEO (Alkyl Phenyl Ethoxylate) free
- Formaldehyde free

The colours exhibited are our standard products but many others are available. Additionally if special shades, concentrations or blends are needed, please contact us.

	Product Name	Colour Index	Lightfastness	Resistance to Bleed in						Heat Fastness	
				Acid	Alkali	Water	Ethanol	Paraffin Wax	Soap	15min 150°C	30min 150°C
	Yellow 10G	Yellow 3	7-8	4	4	5	2	1-2	3-4	4	1-2
	Yellow 2G	Yellow 14	4-5	4-5	4-5	5	4	5	5	4-5	4-5
	Yellow 5GT	Yellow 74	7-8	7	4	4	5	2	1-2	4	1-2
	Yellow R	Yellow 83	7	5-6	4	3	5	5	4-5	5	5
	Orange OL	Orange 34	6	5	5	5	4-5	5	5	4	4



Aquaprint Flex

PIGMENT DISPERSION CONCENTRATES FOR FLEXO INK

	Product Name	Colour Index	Lightfastness	Resistance to Bleed in						Heat Fastness	
				Acid	Alkali	Water	Ethanol	Paraffin Wax	Soap	15min 150°C	30min 150°C
	Scarlet R	Red 2	5	5	5	5	2-3	2	5	5	3
	Scarlet G	Red 112	6-7	5	5	5	4	5	5	5	5
	Red 3R	Red 170	7	5	5	5	4	4	5	5	5
	Red 3B	Red 146	6	4-5	4-5	5	5	5	4-5	4	4
	Rubine 4B	Red 57.1	3-4	3	3-4	5	4	5	1	5	3
	Rubine DC	Red 184	6	5	5	5	5	4	5	5	5
	Red 8I	Red 81.3	3	3-4	2-3	3-4	2-3	5	2-3	3-4	3
	Blue 3G	Blue 15.3	8	5	5	5	5	5	5	5	5
	Violet 27	Violet 27	3	2-3	2-3	4	1	5	1	1	3
	Violet B	Violet 23	8	5	5	5	4	5	5	4	4
	Green G	Green 7	8	5	5	5	5	5	5	5	5
	Black	Black 7	8	5	5	5	5	5	5	5	5

Colours for Toner

A RANGE OF COLOURANTS FOR PRINTER TONER

TTC offers a range of colour dispersions specifically formulated for the use in the manufacture of Electrophotographic Toner for printing.







The range is specially formulated for Polyester & Styrene Acrylic resins and can also be customised for bespoke requirements by our team of development chemists specific to your application. Specially selected pigment for toner applications is utilized and our unique formulations allow for excellent dispersibility, compatibility in toner resins and high transparency.



Our unique manufacturing process and rigid quality control process ensures a very fine homogeneous dispersion. Our colour dispersions offer excellent performance characteristics and are suitable for most toner applications including high image.

These products are currently utilized by manufactures of globally branded toner and they tell us that our colourants allow them to manufacture a high quality toner product giving them an advantage in the market place.

We offer the following colour dispersion:-

	Item #	Product Family	Brochure Name	TTC Product Name
	PB12AQ	Aquaprint Toner	Cyan (Blue)	Cyan Dispersion
	PY17AQ	Aquaprint Toner	Yellow	Yellow Dispersion
	PPI1AQ	Aquaprint Toner	Magenta	Magenta Dispersion
	PR185AQ	Aquaprint Toner	Red	Red 185 Dispersion
	PE10AQ	Aquaprint Toner	Rubine	Rubine Dispersion
	PK25AQ	Aquaprint Toner	Black	Carbon Black Dispersion



Solvent Based Pigment Dispersions



Solvent Based Dispersions

DISPERSIONS FOR SOLVENT BASED RESIN SYSTEMS

TTC provide a wide variety of solvent based dispersions designed to meet the needs of most applications.

These resin types include:

- CAB *Cellulose Aceto-Butyrate*, for flexible packaging / liquid inks
- CAP *Cellulose Aceto-Propionate*, for Automotive / screen inks
- Polyvinyl Butyral, for packaging inks
- Vinyl, for PVC / wall covering type applications
- Acrylics, for various industrial applications
- Nitro Cellulose, for packaging inks
- Alkyd for paints



Universal Dispersions

UNIVERSAL SOLVENT BASED DISPERSION

This range of dispersions is formulated to give maximum compatibility across a variety of solvent systems and allow customers the opportunity to develop a cost effective formulation with excellent performance without the need to carry inventory of different colorant ranges.

Based on an Aldehyde resin system and viscosity controlled these colorants are compatible with:

- CAB resins
- Chlorinated rubber
- VC copolymers
- Acrylic resins
- Urea and Melamine formaldehyde resins
- Alkyd resins
- Epoxy resins
- Hydrocarbon resins

All of these dispersions exhibit:

- Excellent storage stability
- Low viscosity
- Excellent compatibility

Universal Dispersions

UNIVERSAL SOLVENT BASED DISPERSION

The colours exhibited are our standard products but many others are available. Additionally if special shades, concentrations or blends are needed, please contact us.

	Product Name	Colour Index	% Pigment	Lightfastness
	UNL1740	Yellow 74	25	7
	UNL1830	Yellow 83	16	7
	UNL1151	Yellow 151	35	7
	UNL1420	Yellow 42	60	8
	UNL2130	Orange 13	25	6
	UNL3112	Red 112	20	7
	UNL3484	Red 48.4	20	7
	UNL3101	Red 101	60	8
	UNL3170	Red 170	25	7-8
	UNL3122	Red 122	20	8
	UNL5151	Blue 15.1	18	7-8
	UNL5153	Blue 15.3	25	7-8
	UNL9000	White 6	65	8
	UNL8700	Black 7	17	7
	UNL6700	Green 7	25	7-8
	UNL4230	Violet 23	18	8

This information is furnished without warranty as the performance of the final product is a function of many variables outside of our control. Samples of these and any other TTC dispersions are available for customers evaluation.

Alkyd Dispersions

SOLVENT DISPERSIONS FOR PAINTS, WOOD, TINTING AND UV



ALKYD DISPERSIONS

SOLVENT DISPERSIONS FOR PAINTS, WOOD, TINTING AND UV

Formulated to work in a wide range of solvent based applications, our range of long oil alkyd based colour dispersions offer excellent performance properties. Utilizing a mineral spirit type solvent this range is ideal for solvent based industrial coatings such as paints, industrial finishes, industrial maintenance and Wood Coating etc. Our Alkyd based range offers the following performance benefits:-

- Excellent stability and resistance to flocculation
- Ease of Application
- Good Versatility
- Fast dry time
- Gloss
- Hardness & Adhesion
- Corrosion resistance

Various packing options are available, standard (Steel 25 Kg).

Shelf Life – 1 year plus from date of manufacture in unopened containers.
(Recommended to mix before use)

TTC Ltd NALK solvent range of Alkyd based pigment dispersions exhibit High Colour Strength, excellent light fastness and excellent dispersibility. These products are suitable for Automotive, decorative & industrial Paints & coatings as well as wood stain paints.

Alkyd Dispersions

SOLVENT DISPERSIONS FOR PAINTS, WOOD, TINTING AND UV

	Item #	Product Range	TTC Product Name	Colour Index #	% Pigment (Typical)	Light Fastness	Weather Fastness
	NALK1000	Alkyd	Yellow Iron Oxide (Transparent)	Yellow 42	32	8	5
	NALK1003	Alkyd	Yellow 74	Yellow 74	29	7	4 - 5
	NALK1004	Alkyd	Yellow 83	Yellow 83	20	7	3 - 4
	NALK1005	Alkyd	Yellow 1	Yellow 1	17	6 - 7	3 - 4
	NALK1728	Alkyd	Yellow 151	Yellow 151	29	7 - 8	4 - 5
	NALK2002	Alkyd	Orange 34	Orange 34	25	5 - 6	3 - 4
	NALK2130	Alkyd	Orange	Orange 13	24	7 - 8	3 - 4
	NALK3000	Alkyd	Red Iron Oxide	Red 101	32	7 - 8	5
	NALK3004	Alkyd	Scarlet R	Red 3	32	6	4
	NALK3005	Alkyd	Rubine	Red 57.1	30	6	6
	NALK3112	Alkyd	Scarlet G	Red 112	24	6 - 7	4 - 5
	NALK3484	Alkyd	Blue shade Red	Red 48.4	24	6 - 7	4
	NALK4001	Alkyd	Violet	Violet 23	11	7 - 8	5
	NALK5003	Alkyd	Blue 15.3	Blue 15.3	20	7 - 8	5
	NALK5005	Alkyd	Blue 15.3	Blue 15.3	18	7 - 8	5
	NALK6002	Alkyd	Green	Green 7	24	7 - 8	5
	NALK8001	Alkyd	Black	Black 7	32	8	5
	NALK8003	Alkyd	Black	Black 7	24	8	5
	NALK8004	Alkyd	Black	Black 7	28	8	5
	NALK9000	Alkyd	White (TiO2)	White 6	60	8	5



NSBA

ALCOHOL BASED DISPERSIONS

TTC Ltd NSBA range of alcohol based pigment dispersions are highly stable and suitable for coatings, animal marking, concrete and construction type applications.

This range consists of pigment finely dispersed in an ethanol base with an aldehyde resin.

These products are made in our Oldbury (near Birmingham) facility which is an ISO9001 (Quality), ISO14001 (Environment) & ISO45001 (Health & Safety) as well as ATEX/DSEAR Compliant accredited manufacturing site.

Below is our standard range of colour dispersions per colour index. Other colours may be possible and we would encourage contact with our sales team to discuss needs and commercial viability.

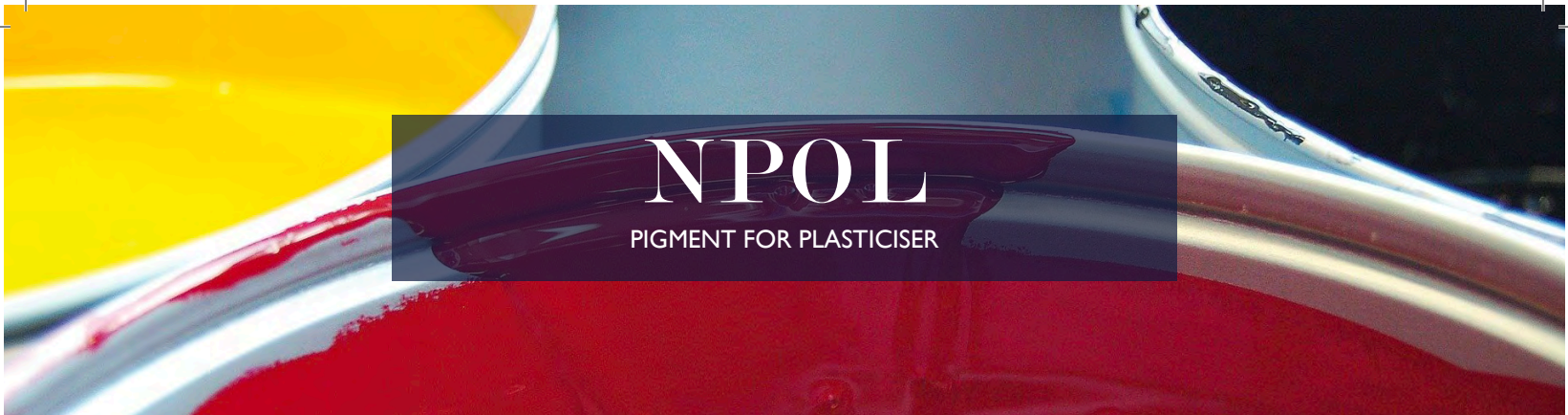




	Item #	Product Family	TTC Product Name	Colour Index #	Composition		Pigment % (Typical)
	NSBA1151	Alcohol	Alcohol based Yellow	Yellow 151	Benzimidazolone	Synthetic Organic	31
	NSBA2130	Alcohol	Alcohol based Orange	Orange 13	Dichlorobenzidine	Synthetic Organic	24
	NSBA3112	Alcohol	Alcohol based Red	Red 112	Naphthol	Organic	20
	NSBA4230	Alcohol	Alcohol based Violet	Violet 23	Dioxazine	Organic	16
	NSBA5153	Alcohol	Alcohol based Blue	Blue 15.3	Phthalocyanine	Organic	24
	NSBA6700	Alcohol	Alcohol based Green	Green 7	Phthalocyanine	Organic	24
	NSBA8700	Alcohol	Alcohol based Black	Black 7	Carbon	Inorganic	16
	NSBA9060	Alcohol	Alcohol based White	White 6	Titanium Dioxide	Inorganic	59

% Values are typical





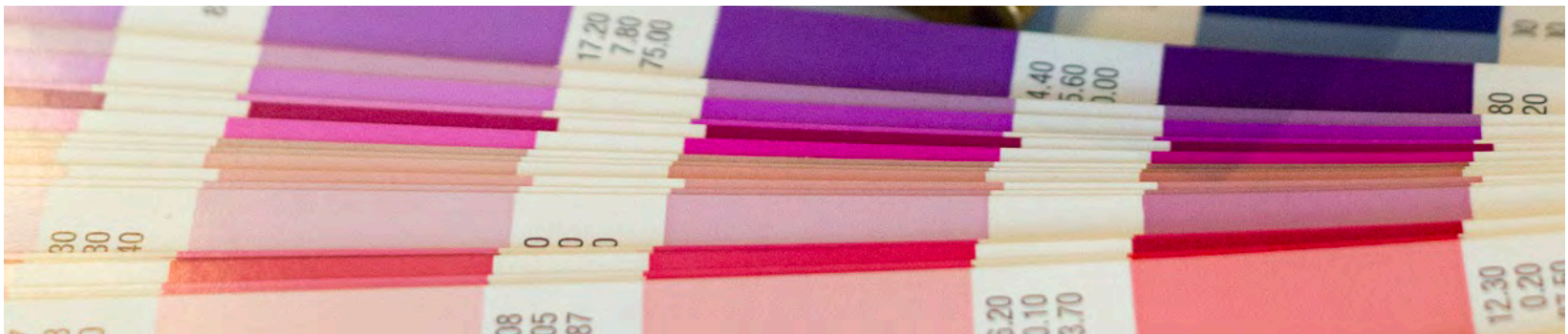
NNCB

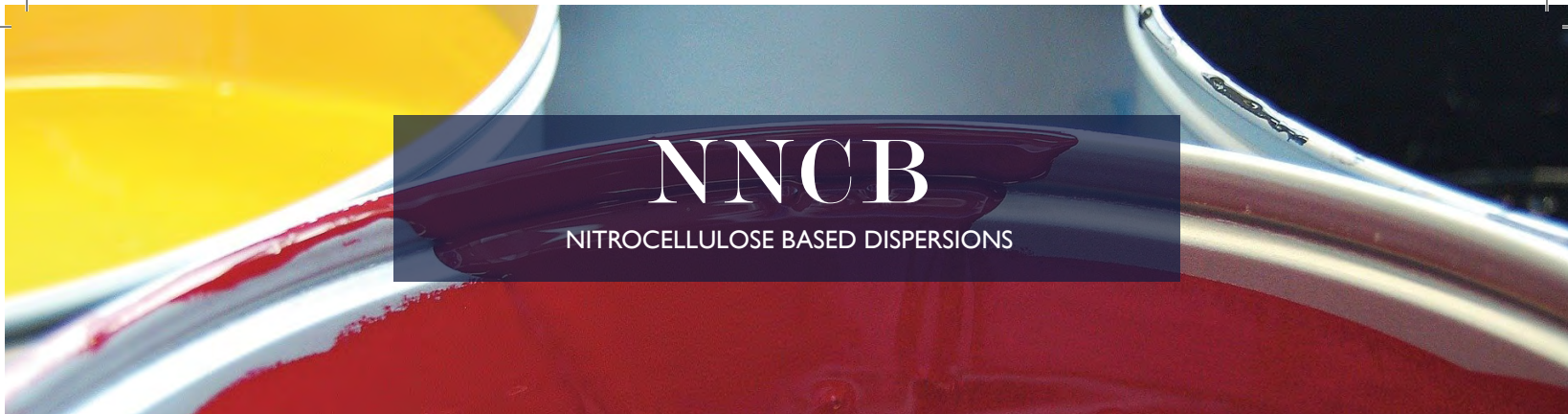
NITROCELLULOSE BASED DISPERSIONS

TTC Ltd NNCB is a range based on nitrocellulose resin and pigment dispersions that is plasticiser free for printing inks & coatings. Ideal applications are gravure and flexographic printing Inks with these products delivering excellent transparency, gloss and rheology.

These products are made in our Oldbury (near Birmingham) facility which is an ISO9001 (Quality), ISO14001 (Environment) & ISO45001 (Health & Safety) as well as ATEX/DSEAR Compliant accredited manufacturing site.

Below is our standard range of colour dispersions per colour index. Other colours may be possible and we would encourage contact with our sales team to discuss needs and commercial viability.





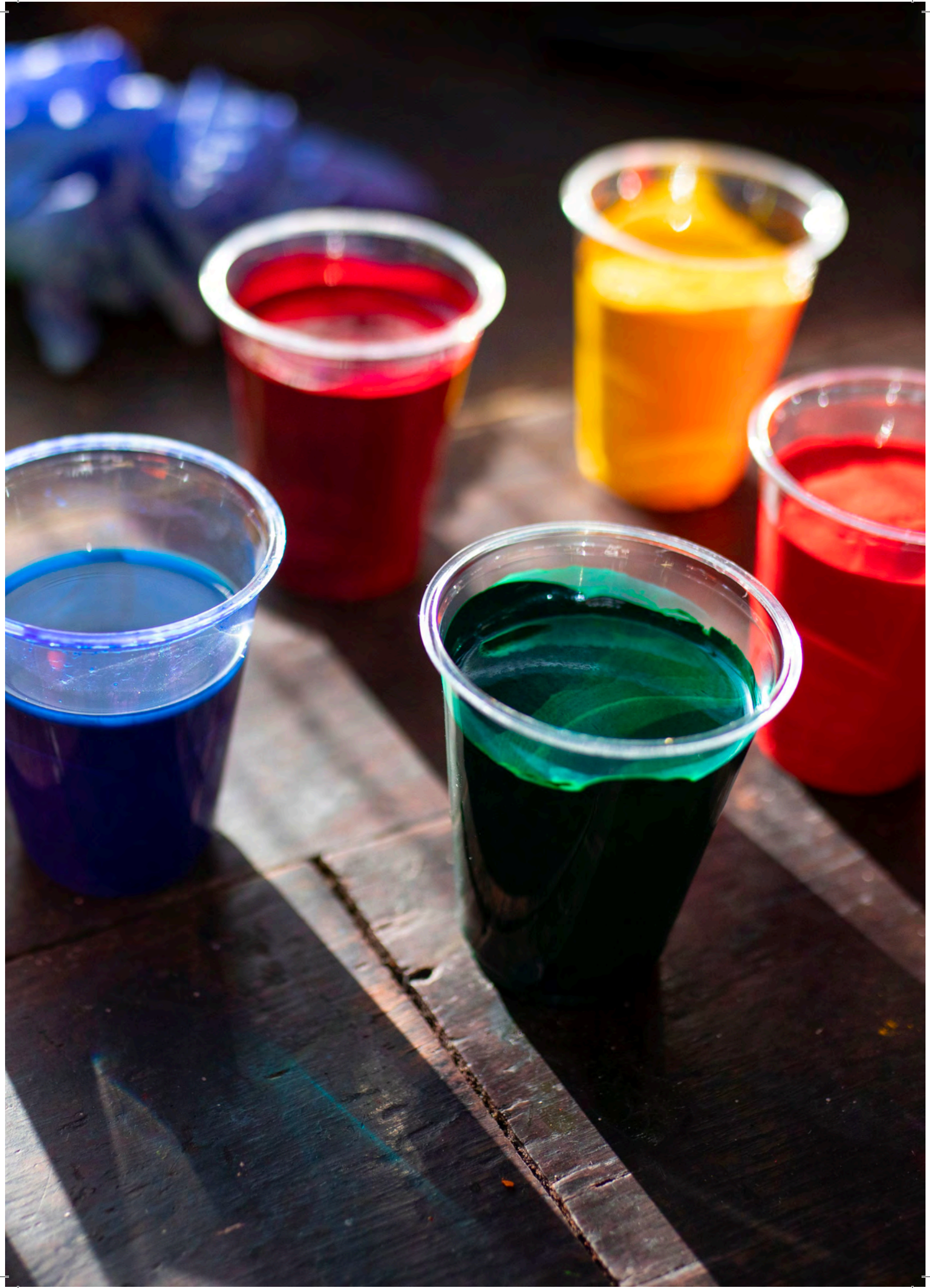
	Item #	Product Family	TTC Product Name	Colour Index #	Pigment %	Light Fastness (Pigment)
	NNCB1000	Nitrocellulose	NC based Yellow	Yellow 13	15	4 - 5
	NNCB1001	Nitrocellulose	NC based Yellow 5G	Yellow 74	15	7 - 8
	NNCB3000	Nitrocellulose	NC based Red	Red 53.1	18	3
	NNCB3001	Nitrocellulose	NC based Rubine 4B	Red 57.1	18.5	3
	NNCB3003	Nitrocellulose	NC based Scarlet G	Red 112	18	6 - 7
	NNCB3004	Nitrocellulose	NC based Red	Red 48.4	15	4 - 5
	NNCB4001	Nitrocellulose	NC based Violet B	Violet 23	11	7 - 8
	NNCB5000	Nitrocellulose	NC based Blue	Blue 15.4	18	7 - 8
	NNCB6000	Nitrocellulose	NC based Green	Green 7	15	8
	NNCB8000	Nitrocellulose	NC based Black	Black 7	20	8

% Values are typical

Handling & Storage

- Ensure containers are tightly sealed when not in use.
- Store in an ambient temperature 0 – 45 C
- Always mix/stir before use
- Use within 12 months

This information is furnished without warranty as the performance of the finished product is a function of many variables outside our control. It is the customers responsibility to test and confirm suitability for the end application. Samples of nitrocellulose based dispersions are available for customer evaluation, upon request.



MOL Dispersions

DISPERSIONS FOR PLASTIC MOULDING

The MOL products are formulated as an alternative to the traditional solid master batches used in plastic moulding. Due to the size and uniformity of the fine particles they can be used at low addition rate typically between 1 and 4%.






They are particularly suitable for:

- Automotive Foams
- Shoe components
- Bottle blowers
- Component moulding

All of these dispersions exhibit:

- Excellent storage stability
- Low viscosity
- Excellent compatibility

The colours exhibited are our standard products but many others are available. Additionally if special shades, concentrations or blends are needed, please contact us.

	Product Name	Colour Index	Lightfastness
	MOL1740	Yellow 74	7
	MOL1030	Yellow 3	7-8
	MOL3112	Red 112	7
	MOL3571	Red 57.1	7
	MOL3300	Red 3	8
	MOL5151	Blue 15.1	7-8
	MOL5153	Blue 15.3	7-8
	MOL9000	White 6	8
	MOL8700	Black 7	7
	MOL6700	Green 7	7-8



NPOL

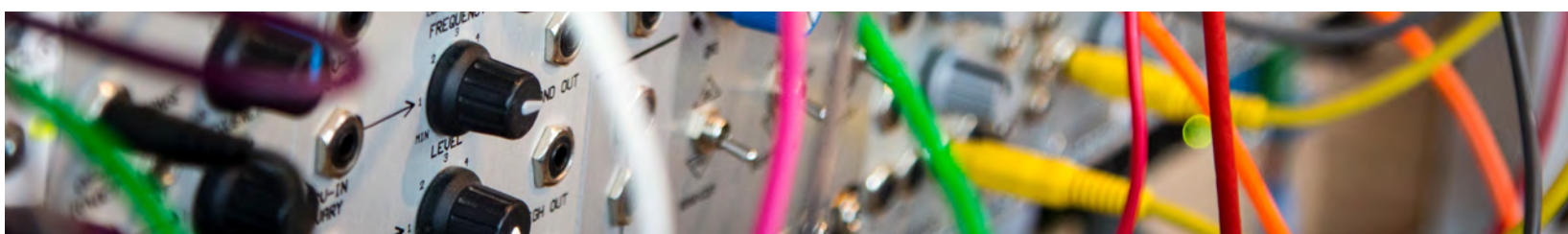
PIGMENT FOR PLASTICISER

TTC NPOL range of pigment dispersions for plasticiser consist of organic and inorganic pigments suspended in DINP (Diisononyl Phthalate plasticiser), compatible with PVC and a wide range of thermoplastic resin plasticisers.

DINP is a multi purpose plasticiser utilized in PVC, as well as applications such as adhesives, caulk, cables & wire, coated fabrics, vinyl flooring, footwear, inks, sealants, polymer and elastomer products.

Overleaf is our standard range of dispersions based on the colour index indicated. Other colours may be possible, just use our Colour Match service to request details.

Various packing options are available from 25Kgs up to intermediate bulk container. Product should always be stored and handled appropriately with lids tightly sealed when not in use. Always mix/stir well before use.





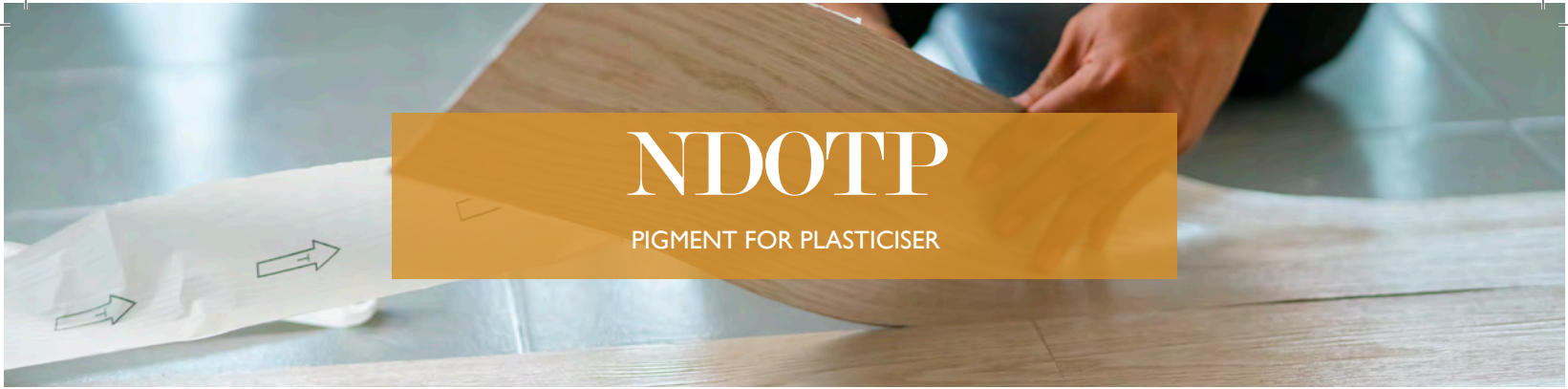
	Item #	Description	Colour Index Name	Chemistry	% Pigment (Typical)	Carrier Content % (Typical)
	NPOL9001	White	White 6	TiO ₂	57	43
	NPOL8002	Black	Black 7	Carbon Black	13	86
	NPOL5001	Blue 3G	Blue 15.3	Phthalocyanine	25	73
	NPOL4000	Violet B	Violet 23	Dioxazine	17	83
	NPOL6001	Green G	Green 7	Phthalocyanine	25	75
	NPOL3254	Red HPP	Red 254	DPP	30	70
	NPOL3004	Red Oxide	Red 101	Iron Oxide	62	38
	NPOL1420	Yellow Oxide	Yellow 42	Iron Oxide	54	46
	NPOL1100	Yellow HPP	Yellow 110	Isoindolinone	37	63
	NPOL1001	Yellow 5GT	Yellow 74	Arylide	19	81

% Values are typical

Handling & Storage

- Ensure containers are tightly sealed when not in use.
- Store in an ambient temperature 0 – 45 C
- Always mix/stir before use
- Use within 12 months

This information is furnished without warranty as the performance of the finished product is a function of many variables outside our control. It is the customers responsibility to test and confirm suitability for the end application. Samples of NPOL Range of DINP dispersions are available for customer evaluation, upon request.



NDOTP

PIGMENT FOR PLASTICISER

TTC NDOTP range of pigment dispersions for plasticiser consist of organic and inorganic pigments suspended in DOTP (Diocetyl terephthalate), a non-phthalate plasticiser that is environmentally safe and possess good plasticizing properties.

DOTP offers good mechanical properties and permanence, provides excellent flexibility and good dielectric properties with similar volatility to DOP. It is suitable for applications such as cable covers, vinyl floors, soft PVC, Caulk/Sealant, polymer and elastomer applications and ideal for coatings for the building & construction industry as well as other flexible applications.

Below is our standard range dispersions based on the colour index indicated. Please note that other colours may be possible and we can address upon request.

Various packing options are available from 25Kgs up to IBC. Product should always be stored and handled appropriately with lids tightly sealed when not in used. Always mix/stir well before use.



NDOTP

PIGMENT FOR PLASTICISER

	Item #	Description	Colour Index Name	Chemistry	% Pigment (Typical)	Carrier Content % (Typical)
	NDOTP9001	White	White 6	TiO2	57	43
	NDOTP8002	Black	Black 7	Carbon Black	13	86
	NDOTP5001	Blue 3G	Blue 15.3	Phthalocyanine	25	73
	NDOTP4000	Violet B	Violet 23	Dioxazine	17	83
	NDOTP6001	Green G	Green 7	Phthalocyanine	25	75
	NDOTP3254	Red HPP	Red 254	DPP	30	70
	NDOTP3004	Red Oxide	Red 101	Iron Oxide	62	38
	NDOTP1420	Yellow Oxide	Yellow 42	Iron Oxide	54	46
	NDOTP1100	Yellow HPP	Yellow 110	Isoindolinone	37	63
	NDOTP1001	Yellow 5GT	Yellow 74	Arylide	19	81

% Values are typical

Handling & Storage

- Ensure containers are tightly sealed when not in use.
- Store in an ambient temperature 0 – 45 C
- Always mix/stir before use
- Use within 12 months

This information is furnished without warranty as the performance of the finished product is a function of many variables outside our control. It is the customers responsibility to test and confirm suitability for the end application. Samples of NPOL Range of DINP dispersions are available for customer evaluation, upon request.

Distribution

COLLABORATING WITH OTHER MARKET LEADERS



TTC represent our sister company Mifar in the UK and Ireland, supplying an extensive range of pigment chips in granular or powder form. These are available as pre-dispersed pigments in a wide variety of resins:

- Water soluble Acrylic
- A range of Vinyl materials
- Polyamides
- Nitrocellulose
- Ethyl Cellulose
- Alcohol Ester/ATBC Plasticizer

These products are ideal for high quality applications including printing inks, industrial inkjet, aluminium foils, wood stains and coatings and nail varnishes.



TTC represent the well-known and regarded nitrocellulose manufacturer Hagedorn NC in the UK and Ireland as distributor/agent. An extensive range of products is available for alcohol and ester applications. Applications include packaging inks, flexographic and rotogravure, whiteboard, foil, film, plastic, PVC etc. Hagedorn NC is available wetted in ethanol, isopropanol, butanol and water.

Bespoke & Toll

WHAT YOU WANT, WHEN YOU WANT AND HOW YOU WANT IT

Our state of the art manufacturing facilities allow for toll services such as:

MIXING

Large tanks up to 25 Te

BLENDING

Wet & Powder

WET GRINDING

Water Base Coatings

SPRAY DRYING

60 Te holding tank capability

BOX PACKING

25 kg and shrink wrap (powders only)

TOLL MANUFACTURING

Removing the processing burden from our customer

COLOUR MATCHING

Technical centre of expertise - Belfast

We may be able to use our facility to manufacture other chemicals that use similar processes, please get in touch, we'd be open to explore your options.



We have 7# production buildings on site in Belfast, Plant # 3 is DSEAR Zone 1 where we can handle flammables.

We are a 'lower-tier COMAH' (Control of Major Accident Hazards) and PPC (Pollution Prevention & control) facility.



We are dedicated to solving customer problems. As well as our high quality and technically superior ranges of dispersions, we make many targeted products to meet specific needs.

Our Toll manufacturing capability takes away the processing burden from our customer, thus allowing them to focus on their own areas of expertise. Our highly experienced and skilled technical staff will analyse your problems and tailor solutions to meet your requirements. Our manufacturing facility allows us to design, make and supply special products and do it with a level of consistency unrivalled in our industry. With batch sizes from 30 kg to 25 tonnes, we can provide answers.

Our plant is designed, managed and operated for flexibility in batch sizes and formulations to meet the most difficult and specific criteria.

All our processes are engineered to meet or exceed current environmental requirements. Emissions and effluent monitoring, energy management, waste minimisation and a high priority for health and safety management are core issues for TTC.


Our processes are ISO9001, ISO14001 and 45001 certified. This service is provided for some of the largest and most advanced companies in their industry sectors. They trust our ability and quality: so should you. Contact us to discuss your problem and let us provide a customised solution.





Product _____ Date _____
Std. _____ Dispersion/Texture _____
Lot/Batch _____ Flow (in cms.) _____
Remarks _____

TENWANTS ORGANIC PIGMENTS LTD.

DRAWDOWN		TINT
<input type="radio"/> FULL SHADE		<input type="radio"/>

Disclaimer

This information and our technical advice - whether in writing or by way of trials - are given in good faith but without warranty. This applies where propriety rights of third parties are involved. Our advice does not release you from the obligation to check validity and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and therefore entirely your own responsibility. Our products are sold in accordance with our General Conditions of Sale and Delivery.

All colours in this booklet are for representational guidance only.

All fastness assessments are usually for the 30g/kg and 7.5g/kg standard depths of shade.

S - Suitable

NS - Not suitable

Colour Fastness to Artificial Light: ISO 105-B02

Colour Fastness to Dry Cleaning: ISO 105-D01

Colour Fastness to Washing 95C : ISO 105-C04

Colour Fastness to Dry Heat: ISO 105-PO1

Assessment of Migration of Textile Colours into Plasticised

Polyvinyl Chloride Coatings: ISO 105 - X10

To read our full terms and conditions please visit:

<https://ttc-colours.com/terms-and-conditions>

TTC Product Guide

Colour Index No.	TTC Code	LF	Aquarine	Aquarine -GOTS	Aquaprint Cell	Aquaprint Tint	Aquaprint Tint FP	Aquaprint Flex	Aquarine SC	UNL	Plasticiser	Solvent	MOL	NC
Black 7	Various	7-8	✓	✓	✓*	✓	✓	✓	✓	✓		✓	✓	✓
Blue 15	PB10	8	✓	✓	✓*	✓	✓				✓	✓	✓	✓
Blue 15.1	PB29	8								✓	✓			✓
Blue 15.3	PB12	8	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
Blue 29	PB29	8	✓									✓	✓	✓
Blue 60	PB60	8	✓			✓						✓	✓	✓
Fl. Blue	PB14	2	✓									✓	✓	✓
Fl. Green	PG12	2-3	✓									✓	✓	✓
Fl. Magenta	PM10	1-2	✓									✓	✓	✓
Fl. Orange	PO17	2	✓									✓	✓	✓
Fl. Pink	PP14	2	✓									✓	✓	✓
Fl. Red	PR28	2	✓								✓	✓	✓	✓
Fl. Yellow	PY19	2-3	✓							✓		✓	✓	✓
Green 7	PG28	8	✓		✓*	✓	✓	✓	✓	✓	✓	✓	✓	✓
Orange 13	PO13	7-8								✓	✓			
Orange 34	PO10	6	✓		✓	✓		✓			✓	✓	✓	✓
Orange 38	PR23	7-8	✓								✓	✓	✓	✓
Orange 43	PO15	7-8	✓	✓		✓						✓	✓	✓
Orange 5	PO16	6-7				✓								
Red 101	PR64	8				✓				✓				
Red 112	PR13	6-7	✓		✓	✓	✓	✓	✓	✓		✓	✓	✓
Red 12	PX10	7	✓	✓		✓						✓	✓	✓
Red 122	PP11	7-8	✓	✓	✓	✓				✓		✓	✓	✓
Red 123	PR41	7	✓	✓								✓	✓	✓
Red 123B	PS11	7	✓									✓	✓	✓
Red 146	PR11	6	✓									✓	✓	✓
Red 146	PR33	6	✓		✓	✓		✓				✓	✓	✓
Red 170 3R	PR50	7	✓					✓				✓	✓	✓
Red 170 5R	PR10	6-7		✓		✓				✓				
Red 184	PE10	6	✓		✓			✓				✓	✓	✓
Red 2	PR16	5-6	✓		✓	✓		✓						

*FDA compliant



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