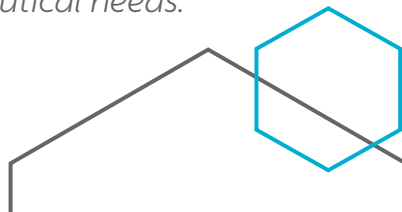




Our Colours... Your way

*Providing innovative colour based solutions
tailored to meet your pharmaceutical needs.*

www.univarcolour.com



Innovation through colours

Sharing knowledge of new processes and new colours that help our customers stay at the cutting edge of their industries.

Univar Colour can produce an infinite number of shades in powder and liquid forms, as well as colours dispersed onto specific substrates.

New vibrant colours & solutions to meet your needs and market trends!

Product awareness, design and legislation:

- › Advice on improving your product design to get maximum performance and ensuring that you meet local and global requirements

The right colour for the right application with the most powerful colouring power:

- › Bespoke colour designed for you with our technical team
- › Right fineness of our products made in the plant
- › No streaking and specking in final products & reduce the complexity to use colours in your plant

Sampling & production trials:

- › Aid in scaling up from lab to factory

Production optimisation and improvements (colour matching service)



Blending

Bespoke colours - In our colour laboratories we can create custom colours & specific shades to match your requirements. Colour/particle size controls, Micro testing and/or irradiation are performed when required.

Powder:

- › Compounding with your ingredients - Handling powders can sometimes cause contamination problems. Univar Colour can blend the powdered colours on to your primary ingredients to help solve this problem.
- › Speckfree colours - Synthetic dyes specially blended to eliminate specking.
- › Water dispersible colours

Liquid:

- › Ready to use pastes - Colour pigments dispersed onto liquid bases.
- › Inks - Specially formulated for printing and/or painting on to ingested products.
- › Compounding with your ingredients - Handling liquids can sometimes cause dosing problems. Univar Colour can blend the liquid colours with your primary ingredients to help solve this problem.



Our pharmaceutical range

Standard dyes & pigments (“straight”)

- › EU & FDA Water or solvent soluble Dyes
- › EU & FDA Lakes
- › High purity grades of Iron Oxides and TiO_2

Customised blends to remove dosing or contamination problems:

Exact shades , batch to batch consistency & uniformity
(colour & particle size controls)

Special pack size on demand

A wealth of “technical solutions” answering your needs for
identification and technical constraints!



Key applications

- › Hard & soft gelatin capsules
 - › Tablet coatings
 - › Compressed tablets
 - › Sachets
 - › Syrups
 - › Toothpastes / Oral Care
-
- › Additional microbiological and analytical testing (such as heavy metals) can be carried out on any blends made, according to customer requirements.
 - › Irradiation of material can be performed to guarantee compliance of the product to a micro specification.



Our customised solutions

Pigment(s) dispersed in a glycerine paste for use in gelatine capsules

- › Pigment in paste form for ease of handling and weighing.
- › Paste disperses more easily into the gelatine base than a powder would.
- › Pigment is finely ground into the paste using a triple roll milling process to ensure absence of larger particles and consistency of colour.



Our customised solutions

Dispersed Lake blends

- › These provide a lake colour diluted to your requirements on base material such as alumina, to make customer weighing/dosing operations easier.
- › More than one lake colour can be incorporated to give the final colour required, rather than adding separate ingredients.
- › Ingredients are finely blended, and milled where necessary, to ensure homogeneity.



Our customised solutions

Speck-free powders

- › These are water soluble dye blends that are usually dispersed onto another material such as Lactose.
- › Where this contains more than one colour ingredient, this process uses an additional wetting and drying phase in the production process. This ensures the colour ingredients are blended to a much finer degree than just a milling process can achieve.
- › The mass tone of a dye is often different to the colour of the dye in solution. The Speck-free process, where wetting out is involved, gives a mass colour similar to the solution colour.
- › Even well blended dye mixes can show specking of different colours as they are dissolving. A Speckfree blend does not and will appear as a single colour.



Our customised solutions

Tablet coating systems: Speedpastes

- › Pigments or lakes dispersed in an aqueous system that forms a high quality film based on HPMC.
- › A Speedpaste can contain a single colour or a blend of colours.
- › If using a blend of colours, these are milled together as a dry mix first and then mixed into the liquid product to ensure fine dispersion of the pigments.
- › Colour ingredients are finely dispersed to ensure smooth surface of resulting film.

















Pharmaceutical Colours



Product Name	Common Name	Shade	Colour Index No.	Field of Application		
				D&C Act India	EC	USA
1. Inorganic Pigments						
Red Iron Oxide	Red Iron Oxide		77491	✓	✓	✓
Yellow Iron Oxide	Yellow Iron Oxide		77492	✓	✓	✓
Black Iron Oxide	Black Iron Oxide		77499	✓	✓	✓
Titanium Dioxide	Titanium Dioxide		77891	✓	✓	✓
2. Organic Pigments						
D&C Red 30	Helindone Pink CN		73360	✗	✗	✓
D&C Red 34 Lake	Deep Maroon		15880:1	✗	✗	✓
D&C Red 36	Flaming Red		12085	✗	✗	✓
3. Solvent Soluble						
D&C Green 6	Quinizarin Green SS		61565	✓	✗	✓
D&C Red 17	Solvent Red 23		26100	✓	✗	✓
D&C Violet 2	Alizurul Purple SS		60725	✗	✗	✓
D&C Yellow 7	Fluorescein		45350:1	✗	✗	✓
D&C Yellow 11	Quinoline Yellow SS		47000	✗	✗	✓
D&C Red 21	Eosin Y Acid Form		45380:2	✗	✗	✓
D&C Red 27	Phloxine B Acid Form		45410:1	✗	✗	✓
D&C Orange 5	Dibromo Fluorescein		45370:1	✗	✗	✓

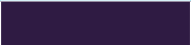







Pharmaceutical Colours



Product Name	Common Name	Shade	Colour Index No.	Field of Application		
				D&C Act India	EC	USA
4. Water Soluble						
D&C Green 5	Alizareine Cyanine Green		61570	✓	✗	✓
FD&C Green 3	Fast Green FCF		42053	✓	✗	✓
FD&C Yellow 5	Tartrazine		19140	✓	✓	✓
FD&C Yellow 6	Sunset Yellow FCF		15985	✓	✓	✓
Quinoline Yellow	–		47005	✓	✓	✗
D&C Yellow 10	–		47005	✗	✗	✓
FD&C Red 3	Erythrosine		45430	✓	✓	✓
D&C Red 22	Eosin Y Na Salt		45380	✓	✗	✓
FD&C Blue 1	Brilliant Blue FCF		42090	✓	✓	✓
FD&C Blue 2	Indigo Carmine		73015	✓	✓	✓
Ponceau 4R	–		16255	✓	✓	✗
Carmoisine	–		14720	✓	✓	✗
Amaranth	–		16185	✗	✓	✗
Patent Blue V	–		42051	✗	✓	✗

Pharmaceutical Colours



Product Name	Common Name	Shade	Colour Index No.	Field of Application		
				D&C Act India	EC	USA
4. Water Soluble						
Black PN	–		28440	X	✓	X
D&C Green 8	Solvent Green 7/ Pyranine		59040	X	X	✓
D&C Orange 4	Acid Orange 7		15510	X	X	✓
FD&C Red 4	Ponceau SX		14700	X	X	✓
D&C Red 28	Phloxine B Na Salt		45410	X	X	✓
D&C Red 33	Acid Fuchsin D		17200	X	X	✓
FD&C Red 40	Allura Red AC		16035	X	✓	✓
D&C Yellow 8	Uranine Na Salt		45350	X	X	✓

Pharmaceutical Colours



Product Name	Common Name	Shade	Colour Index No.	Field of Application		
				D&C Act India	EC	USA
5. Organic Lakes						
FD&C Yellow 5 Lake	Tartrazine Lake		19140:1	✓	✓	✓
FD&C Yellow 6 Lake	Sunset Yellow FCF Lake		15985:1	✓	✓	✓
Erythrosine Lake	–		45430:1	✓	✓	✗
D&C Yellow 10 Lake	–		47005:1	✗	✗	✓
Quinoline Yellow Lake	–		47005:1	✓	✓	✗
D&C Red 21 Lake	Eosin Lake		45380:3	✓	✗	✓
Carmoisine Lake	–		14720:1	✓	✓	✗
Ponceau 4R Lake	–		16255:1	✓	✓	✗
FD&C Blue 1 Lake	Brilliant Blue FCF Lake		42090:2	✓	✓	✓
FD&C Blue 2 Lake	Indigo Carmine Lake		73015:1	✓	✓	✓
D&C Red 7 Ca. Lake	Lithol Rubin BCa Lake		15850:1	✗	✗	✓
FD&C Red 40 Lake	Allura Red AC Lake		16035:1	✗	✓	✓
D&C Red 27 Lake	Phloxine Lake		45410:2	✗	✗	✓
Amaranth Lake	–		16185:1	✗	✓	✗
Patent Blue V Lake	–		42051:1	✗	✓	✗
D&C Red 6 Ba Lake	–		15850:2	✗	✗	✓

Notes





Univar Colour

Victoria House
Radford Way, Billerica
Essex, CM12 0DX

colours@univareurope.com | www.univarcolour.com

© 2018. Univar BV. All rights reserved. UNIVAR, the hexagon, and other identified trademarks are the property of Univar Inc., Univar USA Inc., Univar, or affiliated companies. All other trademarks not owned by Univar Inc., Univar USA Inc., Univar, or affiliated companies that appear in this material are the property of their respective owners. Univar makes no representations and warranties as to the statements of third party producers or manufacturers included in this material. Always read and follow label directions. 000010556-2018

