



**KEYSTONE**

KEYSTONE ANILINE CORPORATION

## DYES FOR INKS

Writing and Marker Inks / Ink Jet

*Changing the way you think about color*





## DYES FOR INKS Writing and Marker Inks / Ink Jet

- **Keyacid powder dyes**
- **Keyacid/ Keyamine/ Keyreact liquid dyes**
- **Keyazine powder dyes**
- **Keyfast Spirit powder dyes**
- **Keystone Liquid Oil dyes**
- **Keystone R-O dyes**
- **Morfast™ dyes**

Keystone offers a very wide and complete range of dyes for use in all aspects of writing inks, markers, highlighters, and ink-jet applications. Keystone dyes are made in both powder and liquid forms for both aqueous and solvent based systems.

A brief summary of various ink applications along with recommended Keystone dye groups is followed by a complete listing of the dyes.

### INK APPLICATIONS AND RECOMMENDED KEYSTONE DYE GROUP

Application	Dye Group
<b>Fiber Tip Pens (aqueous)</b>	Keyacid powders Keyacid/ Keyamine/ Keyreact liquids Keyazine powders
<b>Fiber Line Pens (aqueous)</b>	Keyacid powders Keyacid/ Keyamine/ Keyreact liquids Keyazine powders
<b>Roller Ball Pens</b>	Keyacid powders Keyacid/ Keyamine/ Keyreact liquids Keystone R-O liquids
<b>Overhead Projection Pens</b>	Keyacid powders Keyacid/ Keyamine/ Keyreact liquids Keystone R-O liquids
<b>Highlighter Markers</b>	Keyacid powders Keyacid/ Keyamine/ Keyreact liquids
<b>Felt Pen Markers (solvent)</b>	Keystone Liquid Oil dyes Morfast™ liquids Keyfast Spirit powders
<b>Ink Jet (aqueous)</b>	Keystone R-O liquids
<b>Ink Jet (solvent)</b>	Morfast™ liquid Keyazine powders (alcohol systems only)



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**KEYSTONE KEYACID POWDER DYES**

Keyacid powder dyes are extremely high strength colorants soluble in water and glycols and can also be used in alcohol and glycol ether systems. Keyacid powder dyes have little or no standardizing salts added such as chlorides and sulfates, however these may be present in small quantities from the reaction process of the dye. For applications that require virtually salt free dye, Keystone R-O dyes should be considered.

Product Name / Code	Color*
<b>Keyacid Chinoline Yellow Super</b> 80100385	
<b>Keyacid Pyranine 10G</b> 40600760	
<b>Keyacid Tartrazine W Super</b> 80102371	
<b>Keyacid Metanil Yellow Super</b> 80103654	
<b>Keyacid Orange Y</b> 50100750	
<b>Keyacid Eosine OJ Super</b> 60108780	
<b>Keyacid Brill Red XB Super</b> 60105285	
<b>Keyacid Violet 5BNS Super</b> 70101760	
<b>Keyacid Blue FG</b> 20100950	
<b>Keyacid Ink Blue P</b> 20109350	
<b>Keyacid Brilliant Green G</b> 40172050	
<b>Keyacid Nigrosine 02P Super</b> 10100247	

**KEYSTONE KEYACID, KEYAMINE AND KEYREACT LIQUID DYES**

Keyacid, Keyamine and Keyreact Liquid dyes are exceptionally high strength, anionic, aqueous based liquid concentrates with generally very low salt contents.

Product Name / Code	Color*
<b>Keyacid Uranine K Liquid</b> 80107342	
<b>Keyacid Metanil Yellow Liquid</b> 80103643	
<b>Keyacid Tartrazine W Liquid</b> 80102333	
<b>Keyamine Red 8BL Liquid</b> 60525450	
<b>Keyacid Brill Red XB Liquid</b> 60105233	
<b>Keyreact Red F3B Liquid</b> 60918031	
<b>Keyacid Orange Y Liquid</b> 50100740	
<b>Keyacid Blue FG Liquid</b> 20100931	
<b>Keyamine Turquoise FBL Liquid</b> 20519948	
<b>Keyamine Direct Black SP Liquid</b> 10540742	
<b>Keyacid Nigrosine 2BP Liquid</b> 10100231	

\* The color shades illustrated within this technical bulletin are designed to give a general idea of the color characteristics of each dye, not a guarantee of how the dye will look in a particular formulation. Different viewing monitors and screen resolutions as well as the specific application may give a different variation of the actual color.



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**KEYSTONE R-O LIQUID DYES**

Keystone R-O liquids are highly refined, liquid dyes with exceptionally low salts content (chlorides and sulfates) for use in ink jet and other exceptionally salt critical applications.

Product Name / Code	Color*
<b>Keyacid Tartrazine RO liquid</b> 801-023-22	
<b>Keyamine Yellow RL-RO liquid</b> 805-086-82	
<b>Keyacid Magenta XB-RO liquid</b> 601-052-72	
<b>Keyreact Red F3B-RO liquid</b> 609-180-82	
<b>Keyamine Blue FG-RO liquid</b> 201-009-72	
<b>Keyamine Blue GB-RO liquid</b> 205-199-72	
<b>Keyamine Black F-RO liquid</b> 105-168-42	
<b>Keyamine Black G-RO liquid</b> 105-019-72	

**KEYSTONE KEYAZINE DYES**

Keyazine dyes are cationic, exceptionally brilliant and high strength powders with no added salt diluent. Keyazine dyes are water soluble but for ink applications are most widely used in alcohol, glycol or glycol ether systems.

Product Name / Code	Color*
<b>Keyazine Yellow DEA</b> 80303752	
<b>Keyazine Rhodamine 6GDN</b> 60300160	
<b>Keyazine Rhodamine HDC</b> 60300175	
<b>Keyazine Rhodamine B 500%</b> 70301050	
<b>Keyazine Rhodamine F3B</b> 70301150	
<b>Keyazine Crystal Violet 6B</b> 70300350	
<b>Keyazine Victoria Blue BO-ZF</b> 20300750	
<b>Keyazine Black DS-G</b> 10340553	

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### KEYSTONE KEYFAST SPIRIT DYES

Keyfast Spirit dyes are metal complex, solvent soluble dyes that can be used in a wide range of alcohol, ketone and aromatic hydrocarbon solvents.

FOR MORE INFORMATION PLEASE REFER TO THE  
KEYFAST SPIRIT DYE SHADE CARD

Product Name / Code	Color*
<b>Keyfast Spirit Yellow 2RLS</b> 80606250	
<b>Keyfast Spirit Yellow 2GN</b> 80608250	
<b>Keyfast Spirit Yellow GL</b> 80609050	
<b>Keyfast Spirit Golden Yellow 3R</b> 80640450	
<b>Keyfast Spirit Orange RE</b> 50605450	
<b>Keyfast Spirit Orange RL</b> 50605850	
<b>Keyfast Spirit Orange RLN</b> 50643850	
<b>Keyfast Spirit Red 2BK</b> 60600850	
<b>Keyfast Spirit Fire Red GLS</b> 60608950	
<b>Keyfast Spirit Fire Red G</b> 60611950	
<b>Keyfast Spirit Red KL</b> 60612250	
<b>Keyfast Spirit Red BL</b> 60612252	
<b>Keyfast Spirit Magenta RBS</b> 60612750	

Product Name / Code	Color*
<b>Keyfast Spirit Black X-51</b> 10602750	
<b>Keyfast Spirit Black KR</b> 10602955	
<b>Keyfast Spirit Black RBL</b> 10603450	
<b>Keyfast Spirit Blue 6G-SS</b> 20607050	
<b>Keyfast Spirit Royal Blue</b> 20640350	
<b>Keyfast Spirit Violet C</b> 70640150	
<b>Keyfast Spirit Brown 2RM</b> 30640150	
<b>Keyfast Spirit Dark Brown 5R</b> 30640251	
<b>Keyfast Spirit Green GL</b> 40640250	
<b>Keyfast Spirit Green BL</b> 40640650	
<b>Keyfast Spirit Maroon</b> 60645550	
<b>Keyfast Spirit Purple</b> 70642750	

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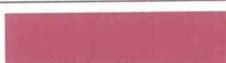



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**KEYSTONE LIQUID OIL DYES**

Keystone Liquid Oil dyes are single phase liquids not made from dye powders. Originally developed for the petroleum market, liquid oil dyes are widely used in xylene and other solvent based permanent marker systems. Owing to their high strength and immediate solubility in a wide range of solvents they are easy to use and very economical. Keystone Liquid Oil dyes are produced in a mixed xylene solvent system and also available in a "high-flash" Aromatic 200 type solvent system as well.

FOR MORE INFORMATION PLEASE REFER TO  
TECHNICAL BULLETIN 043

Product Name / Code	Color*
<b>Liquid Oil Yellow R</b> 80610751	
<b>Liquid Oil Yellow 5G</b> 80641750	
<b>Liquid Oil Orange #2</b> 50641050	
<b>Liquid Oil Red</b> 60616432	
<b>Liquid Oil Red G</b> 60616531	
<b>Liquid Oil Purple</b> 70640440	

Product Name / Code	Color*
<b>Liquid Oil Blue</b> 20609842	
<b>Liquid Oil Green</b> 40640542	
<b>Liquid Oil Brown</b> 30640541	
<b>Liquid Oil Blue Black</b> 10641150	
<b>Liquid Oil Jet Black</b> 10664843	

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**KEYSTONE MORFAST™ LIQUID DYES**

Morfast™ liquid dyes, produced by Sunbelt Corporation and exclusively distributed by Keystone Aniline, are single phase liquids produced in n-propanol and are exceptionally strong and easy to use. The n-propanol system is compatible with a wide range of solvent systems including alcohols, ketones and aromatic hydrocarbon systems.

FOR MORE INFORMATION PLEASE REFER TO  
TECHNICAL BULLETIN 239

Product Name / Code	Color*
<b>Morfast™ Yellow 101</b> 80641250	
<b>Morfast™ Yellow 102</b> 80616142	
<b>Morfast™ Red 101</b> 60642250	
<b>Morfast™ Red 102</b> 60642350	
<b>Morfast™ Red 105</b> 60643150	
<b>Morfast™ Red 106</b> 60643450	
<b>Morfast™ Violet 101</b> 70640041	
<b>Morfast™ Blue 100</b> 20641350	

Product Name / Code	Color*
<b>Morfast™ Blue 105</b> 20641650	
<b>Morfast™ Blue 106</b> 20641942	
<b>Morfast™ Green 101</b> 40641042	
<b>Morfast™ Brown 100</b> 30641050	
<b>Morfast™ Black 101</b> 10640650	
<b>Morfast™ Black 108</b> 10641450	
<b>Morfast™ Black 114</b> 10641750	
<b>Morfast™ Black DC</b> 10640350	

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- In addition to supplying the most comprehensive line of colorants available, at **Keystone Aniline Corporation** we are committed to providing our customers with the best technical information available. Call **1-800-522-4DYE** for samples or technical assistance.
- Please give us a call or visit our web site at **www.dyes.com**
- As a Keystone customer, you will have direct access to professionals who can answer technical questions and provide timely assistance. Please feel free to contact us for samples of our dyes, technical specifications, or for formulating assistance.

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