

Eukesolar[®] 150 liquid dyes

® = Registered trademark of
BASF Aktiengesellschaft

Please file this leaflet in your
"Finishing" binder, Section 2

Metal complex dyes for dyeing and finishing leather.

The Eukesolar 150 liquid dyes are mainly used for dyeing leather by spraying and coating, but they can also be used to dye and shade aqueous finishes. They can also be used for printing designs on leather.

The Eukesolar 150 liquid dyes are distinguished by their brilliance, high lightfastness and their resistance to spotting by water droplets.

Eukesolar 150 liquid dyes

Chemical nature

Metal complex dyes dissolved in organic solvents.

Product range

The Eukesolar 150 liquid dye range comprises the following products.

Eukesolar Yellow G 150 Liquid
Eukesolar Yellow R 150 Liquid
Eukesolar Orange R 150 Liquid
Eukesolar Red G 150 Liquid
Eukesolar Red B 150 Liquid
Eukesolar Rubine B 150 Liquid
Eukesolar Brown 2G 150 Liquid
Eukesolar Brown 5R 150 Liquid
Eukesolar Brown 2RG 150 Liquid
Eukesolar Brown R 150 Liquid
Eukesolar Brilliant Blue 150 Liquid
Eukesolar Navy Blue R 150 Liquid
Eukesolar Black R 150 Liquid
Eukesolar Black 2R 150 Liquid
Eukesolar Blue FL Liquid

Storage

The Eukesolar 150 liquid dyes have a shelf life of at least one year if they are stored in their tightly sealed original packaging at temperatures between $-5\text{ }^{\circ}\text{C}$ and $40\text{ }^{\circ}\text{C}$. Drums should be tightly resealed each time material is taken from them, and their contents should be used up as soon as possible after they have been opened. These products must be protected from severe frost.

Properties

The Eukesolar 150 liquid dyes can be diluted with glycol ethers such as 1-methoxy-2-propanol, ethylene glycol monobutyl ether and diethylene glycol monobutyl ether, and with acetic acid esters such as n-butyl acetate, isobutyl acetate and ethyl acetate. Solutions of Eukesolar 150 liquid dyes diluted with glycol ethers are mainly used in aqueous systems. Other solvents such as short-chain alcohols can also be used, but their compatibility needs to be tested in advance.

The Eukesolar 150 liquid dyes give very fast, intense shades, and they are resistant to discoloration by water droplets. They can be used to dye all types of leather by spraying and curtain coating and for printing designs on leather.

Application

The intensity of the shade can be controlled by adjusting the dye concentration, the type of diluent and the diluent concentration. High-boiling solvents such as methoxypropanol (Solvenon[®] PM) and higher glycol ethers can be added to increase the penetration of the dye into the leather in order to dye the grain layer more effectively. Very deep shades can be obtained by replacing some of the high-boiling solvent with volatile, water-miscible organic solvents such as methanol, ethanol, isopropanol or acetone.

The stability of dilute solutions of Eukesolar 150 liquid dyes and finishes that contain these dyes can be limited, and so it is advisable to prepare them just before they are required and to use them up as soon as possible. When Eukesolar 150 liquid dyes are used to shade aqueous finishes, we would always recommend diluting them with glycol ethers before any of the aqueous components are added when the finish is being prepared.

Eukesolar Blue FL Liquid has to be diluted in advance with Solvenon PM before any water is added, because its miscibility with water is limited. If this dye is to be used for spray dyeing, the total amount of water should not exceed 40% of the total mixture when it is diluted.

Eukesolar Blue FL Liquid can also be used to dye emulsion-type lacquers and solutions of nitrocellulose in organic solvents, but it cannot be used for dip dyeing.

Dyed or printed leathers should be dried thoroughly before they are piled on top of each other. This prevents any unevaporated solvent from causing the dye to migrate into the interior of the leather.

The water used to dilute finishes or dye solutions that contain Solvenon PM or other water-miscible solvents should not be too hard. We would recommend using demineralized water if there are any problems with precipitation.

Examples

1. Spray dyeing

Here, the dye should be diluted with 3–4 times its own volume of Solvenon PM and then with 6–7 times its own volume of water.

2. Dyeing and shading finishes

If Eukesolar 150 liquid dyes are to be used to colour polymer dispersions such as our Corial® binders, we would recommend diluting the dye 1:1 with Solvenon PM, and diluting the binder in advance before the dye solution is stirred in.

3. Printing designs on leather

Leathers can only be printed if they are of uniform thickness. The maximum variation in thickness that can be tolerated is 0.2 mm. Leathers also need to be free of dust.

The viscosity of dye solutions used for printing has to be higher than the viscosity of dye solutions applied by spraying or padding. Their viscosity can be adjusted by adding products such as Eukesol® Binder S. The viscosity should be in the 15–30 sec range (DIN 53221, 4 mm Ford cup). A high viscosity is required for printing sharply defined patterns, and a lower viscosity for printing large areas.

Outline formulation for printing inks

150 parts	Eukesolar 150 liquid dye
500 parts	Solvenon PM
380 parts	Water
10–20 parts	Eukesol Binder S

4. Dyeing nitrocellulose lacquers

100 parts	Corial Lacquer AW
300 parts	Butyl acetate
5–10 parts	Eukesolar 150 liquid dye

The shades of the Eukesolar 150 liquid dyes and their fastness are illustrated in special pocket shade cards.

Further information on the BASF products mentioned in connection with the Eukesolar 150 liquid dyes is given in the corresponding technical information leaflets.

Safety

When using these products, the information and advice given in our **Safety Data Sheets** should be observed. Due attention should also be given to the **precautions** necessary for handling chemicals.

Note

The information submitted in this publication is based on our current knowledge and experience. In view of the many factors that may affect processing and application, these data do not relieve processors of the responsibility of carrying out their own tests and experiments; neither do they imply any legally binding assurance of certain properties or of suitability for a specific purpose. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed.

Printed in Germany

**BASF Aktiengesellschaft
Regional Marketing
Asia**

BASF Colorants Pte. Ltd.
7 Temasek Boulevard
#35-01 Suntec Tower One
Singapore 038987
Tel.: (65) 432 34 00
Fax.: (65) 432 34 34

**BASF Corporation
Regional Marketing
North America, Canada
and Mexico**

Colorants
4330 Chesapeake Drive
Charlotte, NC 28216, USA
Tel.: (1) 704 398 4380
Fax.: (1) 704 398 4250

**BASF S.A.
Regional Marketing
South America**

Corantes
Estrada Samuel Aizemberg 1707
09851-550 São Bernado do Campo/
São Paulo – Brazil
Tel.: (55) 11 751 3189
Fax.: (55) 11 751 2544

**BASF Aktiengesellschaft
Regionales Marketing
Europa, Afrika, Westasien**

Farben
67056 Ludwigshafen/Germany
Tel.: (49) 621 60 41366
(49) 621 60-0
Fax.: (49) 621 60 78452
Telex: 46499-0 bas d