

02.11.2017

Introductory note

DyStar Textile Products Selection of June 2017 to meet the requirements of Benetton Restricted Substances List, as of September 2017

Within their Technical Safety Specifications of September 2017, the Benetton Group S.p.A. defined chemical requirements for Benetton products: Benetton Product Restricted Substance List (RSL).

DyStar has assessed its global product range for textile coloration and finishing against the Benetton Product RSL for apparel and this document indicates the suitability of each product.

Recommendations are based on our experience with well-established test methods and on dye application tests performed under standard lab conditions. It may be that these are not always representative of the conditions used by our customers. The assessment and recommendations given by DyStar therefore do not absolve the user from making their own tests and controls to ensure that the finished textile material conforms to the Benetton Product RSL for apparel. This holds especially for the requirement on extractable heavy metals and respective migration levels according to EN 71-3 (toys), because these are influenced not only by the chemical formulations (e.g. dyestuffs) used, but mainly by many other dyeing and finishing parameters.

Concerning chlorinated benzenes and toluenes we refer to a maximum limit of 1.0 mg/kg on the finished article, unless no additional restriction is specified in our assessment.

- | | |
|---------|---|
| ● Green | Suitable without limitation according to Benetton Product RSL for apparel |
| » Amber | Suitable with certain limitations indicated by footnotes in the tables |
| X Red | NOT recommended |

As the world's leading manufacturer of textiles dyes and auxiliaries, DyStar shares Benetton's concern for the health of its customers as well as for the environment and working conditions.

The use of high quality products from DyStar and the technical expertise of DyStar personnel offer customers the best assurance of meeting the high standards of the Benetton Product RSL.

Our assessment covers products for coloration and finishing of textiles on the DyStar product range which we recommend for apparel articles in compliance with the Benetton Product RSL (status: September 2017). For information on compliance of DyStar products with the limits of the ZDHC MRSL 1.1 2015 kindly refer to the DyStar ZDHC MRSL Compliant Product list.

In case of missing items or uncertainties do not hesitate to contact your sales representative.

With best regards,

Dr. Anette Weber
Technology
Global Product Safety & Ecology

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The downloadable pdf-document has been issued electronically and is valid without a signature.



Overview of DyStar product ranges

Textile Colorants

For cellulosic fibers

- Reactive dyes
- Direct dyes
- Vat dyes
- Dyes for Denim
- Azoic / developing dyes

Levafix[®], Procion[®], Remazol[®] and Lava Dye Sirius[®]
Indanthren[®] Colloisol and liquid
DyStar Indigo, Cassulfon[®]
Fast dyes, Naphtol AS[®], Phtalogen[®]

For polyester fibers

- Disperse dyes

Dianix[®]

For wool

- After chromed dyes
- Acid metal complex dyes
- Reactive dyes
- Acid dyes

Diamond[®]
Isolan[®]
Realan[®]
Supralan[®] and Telon[®]

For polyamide

- Acid metal complex dyes
- Acid dyes
- Acid/MC dyes for fashion garment

Isolan[®]
Telon[®]
Lava Dye Antique

For acrylic fibers

- Basic dyes

Astrazon[®]

For textile printing

- Pigment preparations
- Inks for digital printing
- Printing inks (liquid)
- Powder ink concentrates

Imperon[®]
Colaris[®]
Jettex[®] A, Jettex[®] D and Jettex[®] R
Jettex[®] highly purified dyes: Jettex[®] A and Jettex[®] R

Auxiliaries

- Pretreatment & Dyeing & Printing Auxiliaries
- Finishing Auxiliaries
- Laundry Auxiliaries

Sera[®]
Evo[®]
Lava[®]



DyStar products as per your *eliot* selection from **21.11.2018**

Postive List - Benetton®
Product RSL Version September 2017

Dyestuff	Remarks	General remarks	children < 14 years	adults > 14 years
Lava Cell NDF			●	●

- Green Suitable without limitation according to Benetton® RSL for apparel
- » Amber Suitable with certain limitations indicated by Footnotes in the table
- × Red NOT recommended



DyStar products as per your *eliot* selection from **21.11.2018**

Footnotes, Postive List - Benetton®
Product RSL Version September 2017

Committed to Sustainability

At DyStar, our products and services help customers worldwide reduce costs, shorten lead times and meet stringent quality and ecological specifications.

Astrazon, Cassulfon, Dianix, DyStar, econfidence, eliot, Evo, Imperon, Indanthren, Isolan, Jettex, Lava, Naphtol AS, Optidye, Phtalogen, Procion, Realan, Remazol, Sera, Sirius, Supranol, Telon are registered trademarks of DyStar Colours Distribution GmbH, Germany.

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