

Technical Information



Nippon Kayaku (Thailand) CO., LTD.
Technical Service Center

(vol.02)

「Black for dyeing CDP: KAC Black HF-ED」

○KAC Black HF-ED for CDP dyeing.

- KAC Black HF-ED was developed as a black cationic dye for dyeing CDP fabrics for sportswear which requires considerable heat fastness. It has also been developed to have low staining on Polyester.
- Recently, as the number of CDP fibers with inferior light fastness levels have been increasing, KAC Black HF-ED can be recommended as it has the best light fastness among the existing ED Black series.

Δ E after Heat Set 190°C × 2min

Dye name	N %o.w.f.	N	2N	3N
KAC Black R-ED	4.0	6.34	4.10	3.58
KAC Black BS-ED	4.6	1.92	1.11	0.59
KAC Black MG-ED(N)	3.9	2.19	1.30	1.33
KAC Black MR-ED(N)	4.7	2.23	1.78	1.34
Cationic Black BS-112D	4.6	2.79	1.73	1.10
KAC Black HF-ED	4.0	1.98	1.42	0.87

- Aside from Kayacryl Black R-ED, most Kayacryl Black ED dyes on CDP fabrics have sufficient resistance to general heat treatments.
- In more severe heat treatment conditions, Kayacryl Black HF-ED can be recommended.

Light fastness

- Poor light fastness levels on CDP can be caused by many factors, including the fineness of the fiber and less dyeing sites.
- The following data shows Heat fastness, Light fastness (AATCC 20AFU), and Polyester staining (CDP/PET 50/50) of Kayacryl Black ED series.

Dye name	%o.w.f.	Heat fastness (Δ E)		Light fastness AATCC 20AFU		CDP/PET
		180°C, 1min	190°C, 2min	KYK CDP	Customer CDP	PET stain
KAC Black R-ED	8.0	4 (1.00)	3 (1.84)	4	3	3
KAC Black BS-ED	9.2	4-5(0.25)	4-5(0.41)	3-4	2-3	4
KAC Black MR-ED(N)	9.4	4-5(0.40)	4 (1.00)	4-5	3	4-5
KAC Black MG-ED(N)	7.8	4-5(0.31)	4 (0.71)	4-5	3	4-5
Cationic Black BS-112D	9.2	4-5(0.35)	3-4(1.16)	3-4	3	4-5
KAC Black HF-ED	8.0	4-5(0.21)	4 (0.58)	4-5	3-4	4-5

NIPPON KAYAKU (THAILAND) CO., LTD.

ADD: 13th Floor, Ramaland Building, 952 Rama IV road, Suriyawongse, Bangrak, Bangkok 10500

TEL: +66-2-235-2843 HP: <http://www.kayakuth.co.th>