Auxiliary Product List

pH Control Agent

No.1 Kayaku Buffer P-7 No.2 Kayaslide PH-509 No.3 Kayaku Buffer NFP

Polyester Alkali dyeing aid

No.4 Kayaku Buffer TRA 115

Dispersing and Levelling agent for Cationic dyes

No.5 Kayaclean KFS

Reproducibility improvement agent for Reactive dyes

No.6 Kayatector E

Kayaku Buffer P-7

Buffer agent for dyeing with Kayacelon React

1: Properties

Appearance : White powder

Composition : Phosphoric acid compoundSolubility : Soluble in warm water

• pH : pH value with addition of Glauber's salt (dissolved

in pure water at room temperature)

Kayaku Buffer P-7	1g/L	1g/L	1g/L	1g/L	1g/L	1g/L
Glauber's salt	0	10g/L	20g/L	40g/L	60g/L	80g/L
pH Value	~8.0	~7.6	~7.5	~7.3	~7.2	~7.1

2 : Features and application

• Useful in dyeing of Cotton with Kayacelon React and one-bath dyeing of PET/Cotton blended fabrics with Kayacelon React/Disperse dyes.

3: Method of use

• Use 0.5~1g/L when dyeing with Kayacelon React dyes.

4 : Packaging

• 15kg box

Nippon Kayaku (Thailand) Co., Ltd

Address (Head Office):

13th Floor Ramaland Building, 952 Rama4 rd., Suriyawongse, Bangrak, Bangkok 10500

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Kayaslide PH-509

pH slide agent for dyeing with Kayacelon React

1: Properties

• Appearance : White powder

· Composition : Special organic compound

Solubility : Soluble in water

2: Features and application

- As the dyebath temperature increases, the pH of the dyebath gradually slides to the alkali side, from initial pH of ~5.5 to final pH of ~9.
- Excellent levelness in normal pressure dyeing of cotton and rayon, and also improves final reactive fixing of the dye.
- Improves dyeing reproducibility

3: Method of use

- Use 0.5~1g/L when dyeing with Kayacelon React dyes.
- If strong alkali or acid is used in pretreatment, neutralization is required in advance.
- Use water at 40°C or lower to dissolve Kayaslide PH-509 before dyeing.

4: Caution

Kayaslide PH-509 decomposes as the temperature increases, sliding the pH towards alkali. The decomposed products become formalin and remains in the dyebath. For dyed products in which formalin regulation is a concern, please decide usage after thorough examination of the washing process after dyeing and testing in advance for the formalin content of the dyed product.

5: Packaging

· 15kg box

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Kayaku Buffer NFP

Phosphorous-free buffer agent for dyeing with Kayacelon React dyes

1 : Properties

• Appearance : Pale yellow powder

· Composition : Phosphorous-free compound

Solubility : Soluble in warm water

• pH : pH value with addition of Glauber's salt (dissolved

in pure water at room temperature)

Kayaku Buffer NFP	1g/L	1g/L	1g/L	1g/L	1g/L	1g/L
Glauber's salt	0	10g/L	20g/L	30g/L	40g/L	60g/L
pH Value	~7.2	~7.0	~6.9	~6.9	~6.9	~6.9

2: Properties and applications

•Useful in dyeing of Cotton with Kayacelon React and one-bath dyeing of PET/Cotton blended fabrics with Kayacelon React/Disperse dyes

3: Method of use

• Use 1~2g/L when dyeing with Kayacelon React dyes.

4 : Packaging

• 15kg box

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Kayaku Buffer TRA115

Alkali agent for dyeing PET fiber with disperse dyes

1: Properties

Appearance : Transparent liquid

• Composition : Mixture of organic and inorganic compounds

Soluble in water

• pH : 1g/L solution \rightarrow initial pH ~11.0 final pH ~8.5

: 2g/L solution → initial pH ~11.5 final pH ~9.3

2: Dyes suitable for alkaline dyeing with Kayaku Buffer TRA115

(KP→Kayalon Polyester、 KYC→Kayacelon)

KP Yellow RBL-S 200 KP Blue BR-SF KP Yellow Brown 3RL(EC)143 KP Blue TN-S 200

KP Red 3BL-S 150 KP Navy Blue ECX 300

KP Rubine 3GL-S 200 KP Black ECX 300

3: Features and applications

- It is effective in preventing oligomer generation when dyeing deep shades of PET such as Navy and Black, and also improves the texture of the dyed product. It is also useful in dyeing Alkali-processed PET which generates significant amounts of oligomers.
- No effect on the dispersibility of disperse dyes
- One-bath dyeing of PET/Rayon of Black shade with the following dyes becomes possible.

(Disperse dyes: KP Black ECX 300, Direct dyes: Kayarus Black B 300)

3: Method of use

• Use 1~2g/L when dyeing.

4 : Packaging

25kg plastic container

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Kayaclean KFS

1: Properties

Appearance : Brown liquid

· Composition : Special anionic and nonionic compound

SolubilitySoluble in waterpHpH 6~7 (1g/L)

2: Features and method of use

①Dispersing agent and levelling agent for one-bath dyeing of PET/Cotton blended fabrics with KM-AQ/KYR dyes.

KM-AQ: Kayalon Microester AQ-LE (Disperse dyes)

KYR : Kayacelon React (Reactive dyes)

Use 1~2g/L when dyeing

②Levelling agent for dyeing Acryl fabrics and CDP fabrics with Kayacryl ED dyes.

Use 0.5~3g/L when dyeing

③Improves fastness when two-bath dyeing of Acryl/Cotton blended fabrics with Cationic dyes and Reactive dyes.

Treat by using 2g/L at $70^{\circ}C \times 20$ min after soaping of Reactive dyes.

①Effective to remove adhered cationic compounds on cotton after scouring during dyeing of cotton. When a cationic softening or fixing treatment is conducted after dyeing of cotton, and the same dyeing machine is used subsequently for scouring, the cationic compounds adhered to the dyeing machine may adhere to the newly scoured cotton. The dyes will preferentially adhere to the areas where cationic compounds are attached on cotton, causing uneven dyeing and spot dyeing.

To prevent such problems, add 0.5~1g/L in the scouring bath.

4: Packaging

25kg plastic container

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Kayatector E

Reproducibility improvement agent for Reactive dyes

1: Properties

· Appearance : Light Brown powder

· Composition : Special organic compound

• Soluble in water

• pH : ~7 (1g/L aqueous solution)

2: Features and application

- · Improves dyeing reproducibility when used in reactive dyeing.
- Prevents problems that impede reproducibility due to impurities contained in cotton, water, chemicals (Glauber's salt, soda ash) and others.
- It is also effective as a soaping agent after reactive dyeing.

3: Method of use

• Use 0.5~1g/L when dyeing or soaping.

4: Packaging

· 15kg box

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