TAC STABILIZER

OKUNO CHEMICAL INDUSTRIES CO., LTD.

Sunlight Resistance Improver for Dyed Aluminum Anodizing Film

TAC STABILIZER is designed as a sunlight resistance improver for anodized and dyed aluminum. If added into a dyeing bath, sunlight resistance of anodized and dyed aluminum can be enhanced.

【Advantages】

1. Improve sunlight resistance of anodized and dyed aluminum
2. Can obtain uniformly dyed appearances
3. Can use dyeing bathes for a long term
4. Can add into a dyeing bath directly, no increase in the number of steps
5. Concentration analysis is available

【Physical State】

TAC STABILIZER : For make-up, replenishment
: Colorless to transparent slight yellow, weak acidity, liquid

【Bath Composition and Working Condition】

	Standard	Range
TAC STABILIZER	1 % (10 ml/L)	0.3 to 2.3 % (3 to 23 ml/L)
pH recommendation of dyeing bath	pH 5.2 to 5.6 (77°F : 25℃)	
Note		
TAC STABILIZER has pH buffer effect. In continuous operation, it is recommended to add TAC CONTROLLER PH-5HS into a dyeing bath in order to avoid significant pH change.		

【Applicability to TAC DYESTUFF】

- Effectiveness of sunlight resistance has been proved.

TAC YELLOW-RHM(201)
TAC YELLOW-SGL(203)
TAC ORANGE-LH(301)
TAC ORANGE-CH(302)
TAC RED-GD(101)
TAC FIERYRED-GBM(105)
TAC RED-BLH(102)
TAC RED-BRL(124)
TAC PINK-GLH(139)
TAC PINK-RL(144)
TAC VIOLET-SLH
TAC BLUE- RCD(501)
TAC BLUE-BRL(507)
TAC GREEN-SBM(2)
TAC BRONZE-GM(8)
TAC BROWN-GR(601)
TAC BROWN-RH
TAC BLACK-GLH(402)
TAC BLACK-GRLH(420)
TAC BLACK-SG(B)
TAC BLACK-SLH(415)
TAC BLACK-SLH-AN(415-AN)
TAC BLACK-GBLH(413)
TAC BLACK-NBLH(421)
TAC BLACK-BLH(411)
TOP ADD-500(419)

- Effectiveness of sunlight resistance has not been proved.

TAC YELLOW-SLH(4G)
TOP SYUTETSUAN (Iron Oxalate Salt)
TAC RED-SCH(106)
TAC PINK-BLH(131)
TAC SKYBLUE-GLH(502)
TAC BLUE-SLH(503)
TAC GREEN-GM(1)

【Bath Maintenance】

It is required to analyze and control the concentration and bath pH.

- Dyeing bath pH

It is required to maintain dyeing bath pH from 5.2 to 5.6.
TAC STABILIZER has pH buffer effect. In continuous operation, it is recommended to add TAC CONTROLLER PH-5HS into a dyeing bath in order to avoid significant pH change.
For more information, please refer to the catalogue of TAC CONTROLLER PH-5HS.

It is required to measure bath pH at 77°F (25℃) with pH meter, and to adjust bath pH with the pH adjusters below.

To increase bath pH ： 20 wt% sodium acetate solution or 3 wt% sodium hydroxide solution
To decrease bath pH ： 10 wt% acetic acid solution

- Concentration analysis

The concentration of TAC STABILIZER can be analyzed with ICP emission spectrometer or spectrophotometer. It is recommended to use ICP emission spectrometer because analysis operation is easy.

Concentration analysis using ICP emission spectrometer

1. Take the working solution and cool it to a room temperature.
2. Measure phosphorus concentration with ICP emission spectrometer.

(If TAC STABILIZER concentration is made 10 ml/L of the standard condition, phosphorus concentration will be 3 mg/L.)

Calculation

TAC STABILIZER (ml/L) ＝ Measured value (mg/L) × 3.3

Concentration analysis using spectrophotometer
For detailed procedures using spectrophotometer, please contact us.

- Estimated replenishment

Replenishment amount will be varied by working conditions and/or the shapes of dyed substrates.
Estimated replenishment amount will be 0.02 to 0.06fl-oz/ft^2(0.6 to 2.0 ml/0.1 m^2) of dyed substrates.

【Caution】

If TAC STABILIZER is added into a dyeing bath, dyeing will proceed more gently and uniformly.
After the addition of TAC STABILIZER, it is recommended to observe and adjust dyeing conditions carefully to obtain wanted colors.

【Standard Process】

Pre-treatment	TOP ALCLEAN series, ALSATIN series, TOP ALSOFT series, TOP DESMUT series, ALGLOSS series
↓	
Anodizing	Sulfuric acid bath
↓	
Surface conditioning	TAC SORMAL series
↓	
Dyeing	TAC DYESTUFF ＋ TAC STABILIZER ＋ TAC CONTROLLER PH-5HS
↓	
Sealing	TOP SEAL series

CAUTIONS IN HANDLING

In handling of TAC STABILIZER

1. Handle at well-ventilated places.
2. Wear industrial safety appliances such as goggles, masks, rubber gloves and others.
3. In case of dispersing into eyes, immediately wash out with clean water.
   If you feel pains, go to the hospital for an examination.
4. Don't put into a mouth.
   In case of jumping into a mouth by mistake, swallow a lot of water to vomit it, and go to the hospital for an examination.
5. After working, wash out a mouth and hands with clean water.

OKUNO 奥野製薬工業株式会社 OKUNO CHEMICAL INDUSTRIES CO., LTD.
International Dept.
1-10-25, Hanaten-higashi, Tsurumi-ku, Osaka 538-0044 Japan
TEL 81-6-6961-7802 FAX 81-6-6961-7814