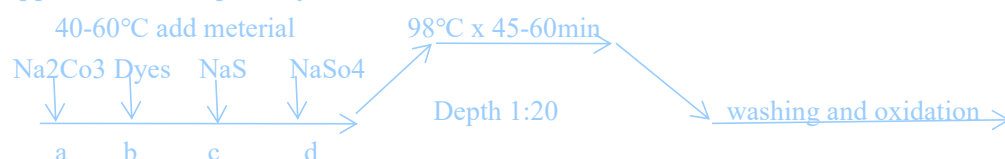


ZDH[®] Sulphur Dyes

Item	Product Name	C.I.NO.	Dyeing Temp. °C	Fastness			
				Light	Washing	Rubbing	
						Dry	Wet
01	Sulphur Light Yellow GC 250%	Yellow 2	95	3-4	4	4-5	3
02	Sulphur Yellow Brown GDR 100%	Orange 1	95	3-4	3-4	3-4	2-3
03	Sulphur Bordeaux 3B 100%	Red 6	95	4	4	4	2-3
04	Sulphur Red GGF 100%	Red 14	95	4	4-5	4-5	—
05	Sulphur Fast Blue 3R 100%	Blue 5	75	5	3	4	2
06	Sulphur Blue BRN 150%	Blue 7	75	5-6	3-4	4-5	2
07	Sulphur Green Blue CV 120%	Blue 15	95	6-7	3-4	4	1-2
08	Sulphur Brill. Green GB 100%	Green 3	95	5	3	4-5	3
09	Sulphur Light Green 7713 300%	Green 14	95	6-7	4-5	4-5	2-3
10	Sulphur Olive Green 200%	Mix	95	5	3	3	2
11	Sulphur Green 511 300%	Mix	95	5	3	3-4	—
12	Sulphur Green 611 300%	Mix	95	5	3	3-4	—
13	Sulphur Dark Brown GD 150%	Brown 4	95	4	4	4	2
14	Sulphur Yellow Brown 5G 150%	Brown 10	95	3	3-4	4	2-3
15	Sulphur Black BR 200%	Black 1	95	5	3	2-3	2
16	Solubilized Sulphur Black BR	Black 1	95	5	3	2-3	2-3
17	Liquid Sulphur Black BR	Black 1	95	5	3	2-3	2

Application of Sulphur dyes:



Note:

- ① a--Na₂CO₃ (g/L) ; b--x% (o.w.f.) ; c--Na₂S:dyes=2~1:1 ; d--Na₂SO₄ (5-10g/L) ;
- ② The dyes is applied in advance to the commendation (wetting);
- ③ After add dyes, usually heat at 1°C/min, heating to 98-100°C, and then keep the temperature 45-60 min for dyeing.
- ④ After dyeing, washing → Oxidation of air or oxidants, 40°C and keeping 20min → washing → drying