

SOMABLACK FILM

1. Outline of SOMABLACK

SOMABLACK is a black film product made by and registered by Somar Corporation. Since its base material is plastic, SOMABLACK has less light-shield characteristic than that of metal plate.

(1) SOMABLACK-R: Regular type

Black film for general purpose applications. Less light-shield characteristics than that of H-type.

Application: Spacer, washer, industrial usage and etc.

(2) SOMABLACK-H: High light-shield type

Black film with high light-shield characteristics.

Application: Camera shutter, diaphragm for camera, light-shield for optical instruments.

* SOMABLACK-H has more than 5.0 neutral density measured with Model 369 densitometer (X-Rite Company).

2. Abbreviation

(1) Light-shield

Product Code	Characteristics
SOMABLACK-R	Regular, Medium light-shield
SOMABLACK-H	High light-shield

(2) Explanation of notations

Notation	Explanation
M	Mat treatment
D	Double side treatment
E	Electrical conductivity

(3) Example of Product Name

① SOMABLACK—R	←	100	←	M	←	D
	Regular	Thickness	Mat treatment	Double side		

• General purpose black film with double-side mat treatment.

② SOMABLACK—H	←	125	←	M	←	D	←	E	←	D
	High light-shield	Thickness	Mat treatment	Double side				Electrical conductivity		Double side

• High light-shield black film with double side mat treatment and double side electrical conductivity.

Refer to the attachment for the thickness of SOMABLACK films.

3. Annealing

In order to have a good flatness of products, Heat Treatment (100~120°C, 1~2 minutes, 10~15 kg) is conducted to eliminate curing of base film prior to the SOMABLACK manufacturing process; however, the roll-type products tend to have more curing problems than sheet-type products after manufactured and stocked.

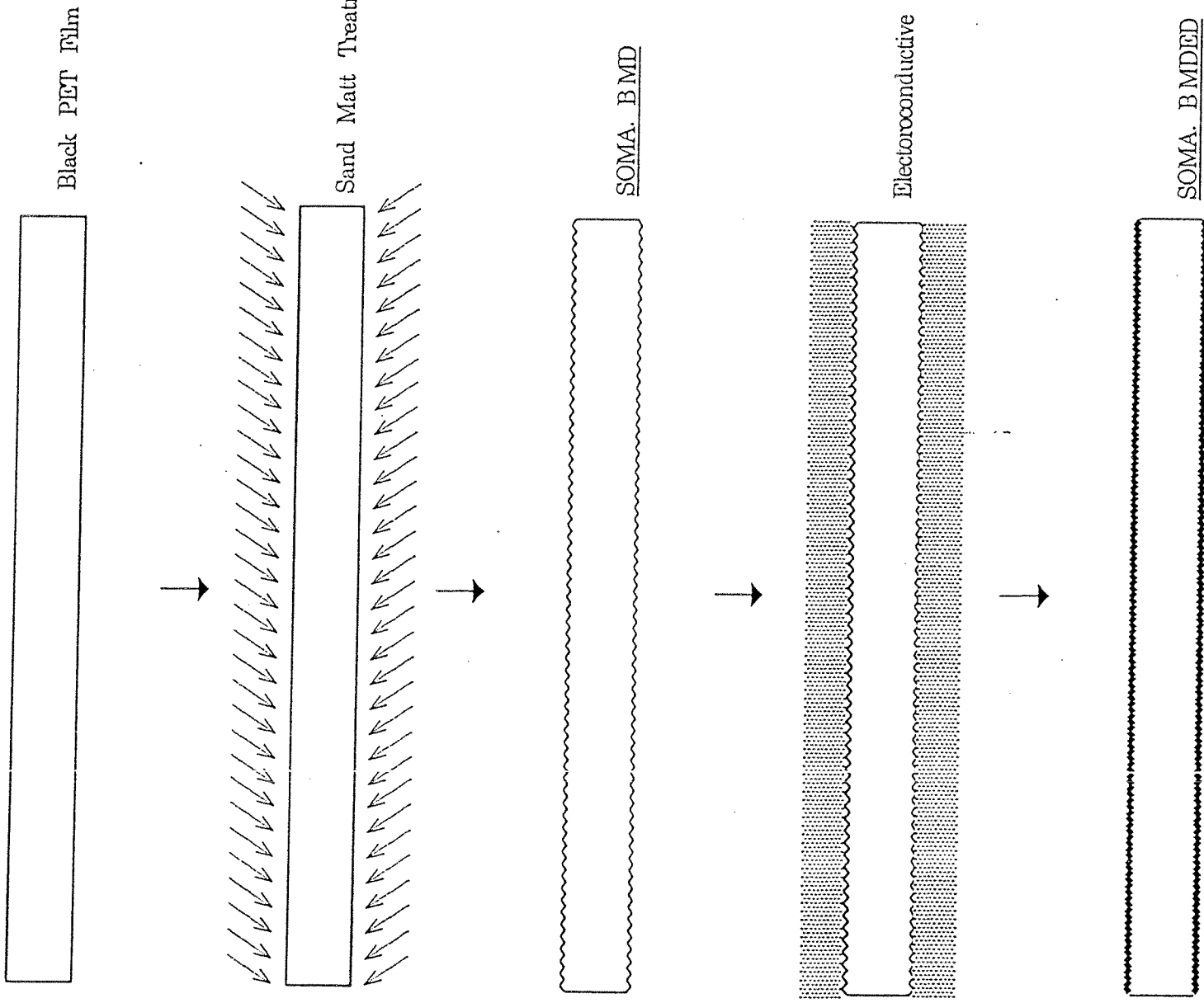
An annealing may be conducted before the punching process. Place 50 - 500 sheets of SOMABLACK in an oven(70 ~100°C x 30~120 minutes) although the annealing condition depends on film thickness, curing condition, required flatness.

An annealing may be conducted after the punching process, too. The punched parts may be placed in the above oven.

[Note]

After heating, cool them gradually to the room temperature. Immediate quenching may worsen the curl of SOMABLACK.

<Flow of Film Treatment Process>

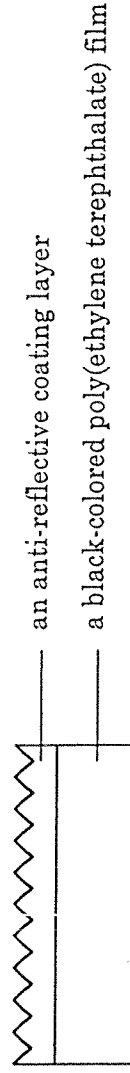


SOMABLACK NR (NR-N50, NR-T50)

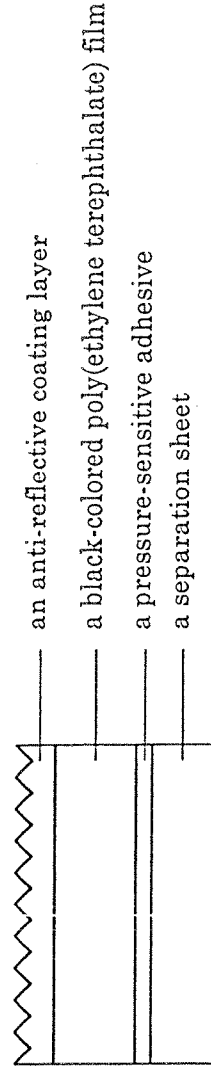
SOMABLACK NR is an anti-reflective film used for reducing the adverse influences of stray light within an optical instrument.

[STRUCTURE]

- SOMABLACK NR-N50 (Normal Type)



- SOMABLACK NR-T50 (Tack Type)



[TECHNICAL DATA]

ITEM	UNIT	TYPE		MEASURING METHOD
		NR-N50	NR-T50	
Thickness	μm	75~93	90~108*	JIS P 8118
Surface Grossness	%	≤ 0.4		JIS Z 8741
		≤ 0.7		
		≤ 0.9		
Surface Roughness, Ra	μm	3.0~6.0		JIS B 0601
Hardness	—	1H \leq		JIS K 5400
Surface Resistivity	Ω/\square	$\leq 10^{10}$		JIS K 6911

*Except for the thickness of a separation sheet (about 140 μm).