

Polyamid - Natural (PA)

Swan Seals PA is a cast natural Polyamid commonly referred to as Nylon or PA. The Material has very good physical and chemical properties and is used in a wide range of applications. Because of high moisture absorption which leads to swelling and the loss of physical properties we do not recommend use in water.

PHYSICAL PROPERTIES

Specific gravity	DIN 53479	g/cm ³	1.15
Moisture absorption	at 23°C / 50% rel. M	%	2.2
Tensile strength	DIN 53455	N/mm ²	85
Elongation at break	DIN 53455	%	25
Ball Hardness (H358/3)	DIN 53456	N/mm ²	165
Modulus	DIN 53457	N/mm ²	3300
Coefficient of sliding		μ	<0,4
Melting temperature		°C	220
Min. Service temperature		°C	-30
Max. Service temperature		°C	105

MAIN APPLICATION

Guide rings
Bushings
Back up rings
Scrapers
Housings

CHEMICAL RESISTANCE

Water up to 70°	S
Water up to 90°	U
HFA	R
HFB	R
HFC	R
HFD	U
Mineral Oils	R
Vegetable Oils	R
Fuels	R
Ozone	U
Air up to 100°	R
Air up to 150°	S
Air up to 200°	U

KEY TO CHEMICAL RESISTANCE

R = resistance

S = suitable

U = unsuitable

ANALYSIS AND EVALUATION

The properties relate to fundamental values of polyamid. Product values mentioned above are corresponding to ASTM or DIN norm and have been tested on standardized plates in the laboratory.