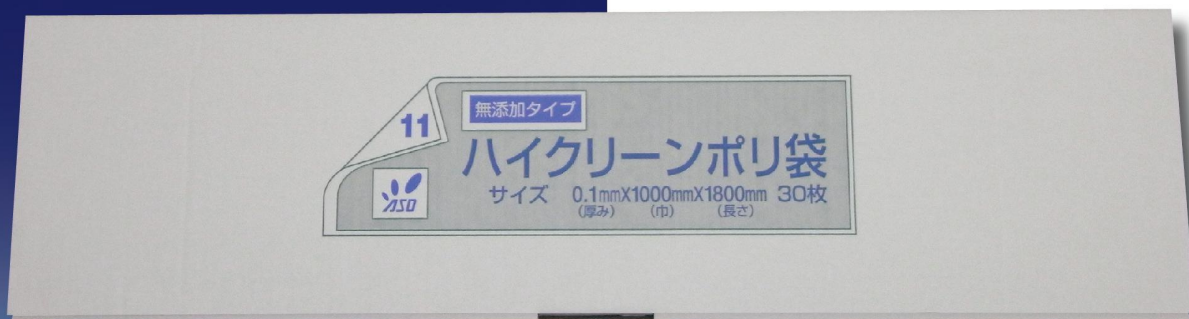
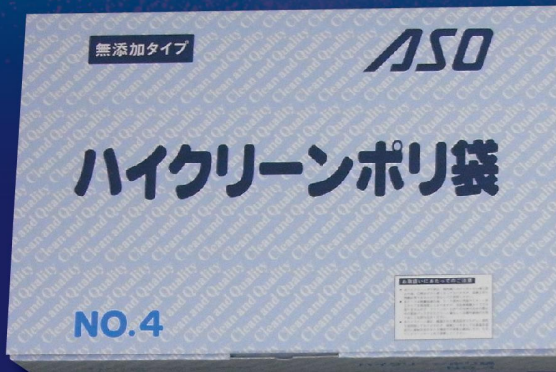




ASO High Clean Poly Bag in Standard Sizes

Clean & Quality



Clean and Quality

ASO Co., Ltd.

"ASO High Clean Poly Bag in Standard Sizes" solves customer problems with clean bags such as:
"It is difficult to obtain a sufficient number of clean bags for our large number of production lots",
"The bags have a long delivery time of about 1 month", and
"We want inner packaging in an easy-to-use small pack size".

Production environment



Feature I

This product uses additive-free raw material and is produced in an ISO class 6 (class 1000) cleanroom.

Feature II

The bags are a "highly clean type" where the number of particles on the inner surface of the bag is controlled. This product complies with the test standards of various regulations, and is ideal for various applications including pharmaceuticals, medical devices, electronic parts, and semi-conductors.

Liquid-borne particle counter



Feature III

We can deliver this product by the case. One case contains 30 to 500 bags, which are vacuum sealed in small units of 10 to 100 bags to make them easier to use.

Inner packaging bags



Feature IV

This product is available in 16 standard sizes and two thicknesses (0.05 mm and 0.1 mm). The size of the bags can be requested to suit the intended application.

Feature V

Upon your request, we can also deliver this product in gamma sterilized form by the case.

Standard compliance

		Test Items
Raw material	Food Sanitation Act (Japan)	Standards and criteria for food and food additives, etc.
		Ministerial Ordinance on Milk and Milk products Concerning Compositional Standards, etc.
Product	Japanese Pharmacopoeia	Polyethylene or polypropylene containers for aqueous injections.
	USP	(661.1)Plastic Material of Construction (661.2)Plastic Packaging Systems for Pharmaceutical Use (87)Biological Reactivity Tests, In Vitro
	21CFR(FDA)	§177.1520 (C) 2.2
	EP	(3.1.4)Polyethylene without additives for containers for parenteral preparations and for ophthalmic preparations.

※Some of the above test contents are excerpted and tested.

Inner surface cleanliness data

ASO High Clean Poly Bag in Standard Sizes uses a selected additive-free raw material that produces very few particles. We have established our own particle standards and measure the number of particles on the inner surface on a lot-by-lot basis in our laboratory.

【 Particle counts 】

ASO High Clean Poly Bag in Standard Size 3							
Particle size		2μm	3μm	5μm	10μm	25μm	40μm
Blank water	Measured value	0	0	0	0	0	0
		0	0	0	0	0	0
		0	0	0	0	0	0
	Maximum	0	0	0	0	0	0
	Average	0	0	0	0	0	0
Minimum	0	0	0	0	0	0	

ASO High Clean Poly Bag in Standard Size 3A							
Particle size		2μm	3μm	5μm	10μm	25μm	40μm
Blank water	Measured value	0	0	0	0	0	0
		0	0	0	0	0	0
		0	0	0	0	0	0
	Maximum	0	0	0	0	0	0
	Average	0	0	0	0	0	0
Minimum	0	0	0	0	0	0	

ASO High Clean Poly Bag in Standard Size 3							
Particle size		2μm	3μm	5μm	10μm	25μm	40μm
Product	Measured value	26	20	2	0	0	0
		44	34	9	0	0	0
		37	23	3	0	0	0
	Maximum	44	34	9	0	0	0
	Average	36	26	5	0	0	0
Minimum	26	20	2	0	0	0	

ASO High Clean Poly Bag in Standard Size 3A							
Particle size		2μm	3μm	5μm	10μm	25μm	40μm
Product	Measured value	39	18	0	0	0	0
		51	26	1	0	0	0
		42	21	0	0	0	0
	Maximum	51	26	1	0	0	0
	Average	44	22	0	0	0	0
Minimum	39	18	0	0	0	0	

* The tables show measured, not guaranteed, values.

Measurement method

The bags were filled with 500 mL of dust-free water with a blank count close to zero and then the bag was tied at the top. Then, 10 mL of the water was taken out of the bag and the number of particles in this sample was counted. This measurement was repeated three times and the average value calculated. The total particle numbers are shown in the tables above.

* Measuring device: Particle counter from RION

Film properties

Measurement item	Product name	0.05mm	0.1mm	Measurement method
Tensile strength (N/mm ²)	MD	28.9	28.0	JIS Z-1702
	TD	18.9	22.9	
Tensile elongation (%)	MD	233	271	JIS Z-1702
	TD	629	642	
Tear strength (N/mm)	MD	99.0	29.4	JIS K-7128
	TD	56.2	37.9	
Seal strength (N/10mm)		9.1	19.5	Our measurement method
Oxygen permeability (ml/m ² · 24h · MPa)		38996	19701	JIS K-7126
Water vapor permeability (g/m ² · 24h)		9.23	4.72	JIS Z-0208

* The table shows measured, not guaranteed, values.

Data for metal impurities

This product uses a raw material with minimal contamination by "metal impurities", which are unfavorable for semiconductor and electronic devices.

Metal type	0.05mm	0.1mm
Li	<0.0004	<0.0004
Na	0.0025	0.0053
Al	0.008	0.014
K	<0.0004	<0.0004
Ca	0.29	0.017
Cr	0.0006	0.0004
Fe	0.0022	0.0019
Ni	0.0017	0.0005
Cu	<0.0004	0.0018
Zn	0.0022	0.0027

* The table shows measured, not guaranteed, values.

Size List of ASO High Clean Poly Bag in Standard Sizes

Size No.	Size (mm)	Thickness (mm)	Quantity	Minimum quantity
Size 1	150 × 250	0.05	500 bags per case (100 bags × 5 bundles)	1 case
Size 2	200 × 300	0.05	500 bags per case (100 bags × 5 bundles)	1 case
Size 3	260 × 380	0.05	500 bags per case (100 bags × 5 bundles)	1 case
Size 4	300 × 450	0.05	500 bags per case (100 bags × 5 bundles)	1 case
Size 5	360 × 500	0.05	200 bags per case (50 bags × 4 bundles)	1 case
Size 6	400 × 550	0.05	200 bags per case (50 bags × 4 bundles)	1 case
Size 7	460 × 600	0.05	200 bags per case (50 bags × 4 bundles)	1 case
Size 8	550 × 900	0.1	80 bags per case (20 bags × 4 bundles)	1 case
Size 9	680 × 1150	0.1	50 bags per case (10 bags × 5 bundles)	1 case
Size 10	800 × 1400	0.1	40 bags per case (10 bags × 4 bundles)	1 case
Size 11	1000 × 1800	0.1	30 bags per case (10 bags × 3 bundles)	1 case

Size 1A	150 × 250	0.1	250 bags per case (50 bags × 5 bundles)	1 case
Size 2A	200 × 250	0.1	250 bags per case (50 bags × 5 bundles)	1 case
Size 3A	250 × 300	0.1	250 bags per case (50 bags × 5 bundles)	1 case
Size 5A	350 × 400	0.1	100 bags per case (25 bags × 4 bundles)	1 case
Size 7A	450 × 600	0.1	100 bags per case (25 bags × 4 bundles)	1 case



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