

# JSA調査データ (アレルゲン別\_陽性率)

※JSA1994,JSA2008, Japanese baseline series(JSA2015)はアレルゲンが違いますので、別紙にてご確認ください。

Year		JSA1994								JSA2008						Japanese baseline series(JSA2015)		
		1994	1995	1997	1998	1999	2000	2003	2005.4-2008.3	2009	2010	2011	2012	2013	2014	2015	2016	2017
Number of total cases		1592	1665	1309	1573	1555	1602	805	1669/3years	2093	1927	2314	2586	2209	1929	1217	1517	1598
Metal	Cobalt chloride	17.3%	18.6%	18.4%	17.2%	14.3%	14.5%	18.9%	11.1%	6.4%	7.6%	8.8%	9.1%	8.8%	8.4%	8.4%	8.0%	9.3%
	Nickel sulfate	13.5%	14.4%	13.8%	16.2%	12.4%	15.5%	17.5%	11.9%	11.6%	14.2%	15.2%	16.1%	15.1%	16.7%	23.5%	25.3%	24.9%
	Potassium dichromate	9.2%	7.7%	9.2%	13.7%	9.7%	10.6%	13.6%	7.3%	6.6%	8.3%	7.0%	8.1%	7.5%	4.7%	3.0%	2.2%	2.6%
	Ammoniated mercuric chloride	7.3%	6.9%	7.0%	7.4%	6.8%	8.0%	6.3%	3.2%	5.0%	5.7%	6.2%	5.4%	5.8%	5.3%	7.1%	5.8%	4.6%
	Gold sodium thiosulfate	nt	10.7%	nt	8.3%	6.9%	7.0%	6.2%	5.9%	3.5%	3.0%	4.5%	5.4%	5.2%	5.7%	25.7%	23.7%	26.9%
Rubber additives	Thiuram mix	2.6%	2.2%	1.6%	2.0%	2.0%	2.3%	4.2%	3.0%	3.6%	5.2%	5.3%	3.5%	3.4%	5.4%	4.8%	3.8%	2.9%
	PPD black rubber mix	1.2%	1.4%	1.2%	1.5%	1.0%	1.1%	2.4%	1.3%	1.8%	1.7%	1.7%	1.8%	1.2%	0.8%	1.1%	1.4%	1.4%
	Mercapto mix	0.6%	0.8%	1.0%	0.7%	0.7%	0.8%	1.2%	0.9%	1.0%	1.4%	0.8%	0.8%	0.6%	0.9%	1.4%	1.6%	0.7%
	Mercaptobenzothiazole	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6%	1.2%	0.5%
	Dithiocarbamate mix	0.5%	0.5%	0.9%	0.5%	0.6%	1.3%	1.1%	1.3%	1.3%	1.5%	1.1%	1.0%	1.2%	1.8%	5.8%	6.3%	6.6%
Topical drugs	Caine mix	1.8%	3.0%	2.3%	2.4%	1.4%	2.6%	2.8%	2.5%	4.0%	3.0%	2.1%	2.3%	2.5%	1.7%	1.6%	1.9%	2.5%
	Fradiomycin sulfate	4.0%	3.8%	4.9%	5.9%	6.0%	5.0%	3.9%	7.4%	6.0%	5.6%	6.0%	7.0%	7.7%	7.6%	4.4%	3.8%	4.4%
Cosmetics	Balsam of Peru	5.2%	4.5%	3.4%	4.0%	4.0%	4.0%	4.6%	4.0%	4.4%	5.1%	5.7%	4.5%	5.6%	4.6%	1.8%	2.0%	1.7%
	Fragrance mix	5.8%	4.9%	5.6%	4.8%	5.0%	5.6%	4.0%	6.2%	6.4%	5.7%	6.1%	6.6%	6.0%	5.6%	6.0%	5.4%	5.1%
	p-Phenylene diamine	6.1%	7.1%	6.0%	4.8%	4.5%	5.7%	7.9%	5.7%	7.0%	6.2%	6.6%	7.1%	7.2%	7.7%	9.2%	8.6%	9.2%
	Lanolin alcohol	2.8%	3.3%	1.8%	2.7%	2.7%	3.6%	2.7%	2.9%	1.8%	2.0%	2.8%	2.1%	2.7%	2.3%	3.1%	1.9%	2.0%
	Rosin	2.3%	2.2%	1.7%	2.3%	2.0%	2.2%	3.2%	2.4%	2.3%	2.5%	2.4%	2.3%	2.4%	1.7%	2.5%	1.9%	1.5%
Synthetic resin	p-tertiary-Butylphenol formaldehyde resin	1.7%	1.3%	1.2%	1.5%	1.9%	2.2%	1.9%	1.9%	1.5%	1.9%	1.8%	0.9%	1.3%	1.0%	3.8%	3.1%	2.7%
	Epoxy resin	nt	nt	nt	nt	nt	nt	nt	nt	0.9%	1.0%	0.7%	0.5%	0.7%	0.7%	1.9%	1.8%	1.6%
Preservatives	Thimerosal	4.7%	5.8%	4.7%	5.6%	4.6%	4.8%	3.9%	3.8%	2.9%	3.4%	4.6%	4.3%	5.6%	3.7%	3.3%	2.9%	2.8%
	Paraben mix	1.8%	1.5%	1.1%	1.3%	1.3%	1.7%	1.9%	1.2%	2.5%	2.6%	2.0%	2.2%	2.1%	1.7%	1.3%	1.0%	1.2%
	Formaldehyde	1.2%	2.6%	2.4%	4.0%	3.6%	1.6%	2.7%	1.5%	2.0%	2.0%	2.3%	2.3%	2.0%	1.6%	0.7%	0.6%	1.0%
	Kathon CG	1.3%	1.5%	0.9%	1.6%	1.1%	0.9%	1.0%	1.1%	1.2%	1.9%	2.7%	2.0%	2.7%	2.7%	4.7%	4.3%	3.9%
Plants	Primin	0.7%	0.6%	0.6%	0.8%	1.0%	1.6%	1.4%	0.7%	0.8%	0.8%	0.7%	0.6%	0.9%	0.7%	-	-	-
	Urushiol	9.3%	10.4%	8.8%	8.5%	9.8%	9.9%	7.2%	7.5%	10.3%	11.5%	10.5%	11.4%	10.5%	12.5%	11.5%	9.7%	8.6%
	Sesquiterpene lactone mix	nt	nt	nt	nt	nt	nt	nt	nt	1.5%	1.0%	1.0%	1.2%	0.8%	1.5%	-	-	-

Test materials		Concentration/vehicle
1	Cobalt chloride	1% pet.
2	Nickel sulfate	2.5% pet.
3	Potassium dichromate	0.5% pet.
4	Thiuram mix	1.25% pet.
		Tetramethylthiuram disulfide(TMTD) 0.25%
		Tetraethylthiuram disulfide(TETD) 0.25%
		Tetramethylthiuram monosulfide(TMTM) 0.25%
		Dipentamethylenethiuram tetrasulfide(DPTT) 0.25%
5	p-phenylenediamine-black rubber mix	Tetrabutyl thiuram disulfide(TBTD) 0.25%
		0.6% pet.
		N-1,3-dimethylbutyl-N'-phenyl-p-phenylenediamine(DMBPPT) 0.25%
6	Mercapto mix	N,N'-Dipenyl-p-phenylenediamine(DPPD) 0.25%
		N-Isopropyl-N'-phenyl-p-phenylenediamine(IPPD) 0.10%
		2% pet.
		Cyclohexylbenzothiazyl sulfenamide(CBS) 0.5%
		Dibenzothiazyl disulfide(MBTS) 0.5%
7	Caine mix	Mercaptobenzothiazole(MBT) 0.5%
		Morpholinothiobenzothiazole(MMBT) 0.5%
		7% pet.
		Dibucaine HCl 1%
8	Fradimycin sulfate	Procaine-HCl 1%
		Ethyl aminobenzoate 5%
		20% pet.
9	Balsam of Peru	25% pet.
10	Rosin	20% pet.
11	Fragrance mix	8% pet.
		$\alpha$ -Amylcinnamic aldehyde 1%
		Cinnamic aldehyde 1%
		Cinnamic alcohol 1%
		Eugenol 1%
		Geraniol(S) 1%
		Hydroxycitronellal 1%
		Isoeugenol 1%
		Sandalwood oil 1%
12	Dithiocarbamate mix	2% pet.
		Zinc dimetyldithiocarbamate(ZDMC) 0.5%
		Zinc dietyldithiocarbamate(ZDEC) 0.5%
		Zinc dibutyldithiocarbamate(ZDBC) 0.5%
		Zinc etylphenyldithiocarbamate(ZEPC) 0.5%
13	Paraben mix	15% pet.
		Benzyl paraben 3%
		Butyl paraben 3%
		Ethyl paraben 3%
		Methyl paraben 3%
		Propyl paraben 3%
14	p-Phenylenediamine free base (PPD)	1% pet.
15	Lanolin alcohol	30% pet.
16	p-tert-Butylphenol formaldehyde resin (PTBP-FR)	1% pet.
17	Bisphenol A	1% pet.
18	Ethylenediamine dihydrochloride	1% pet.
19	Primin	0.01% pet.
20	Urushiol	0.002% pet.
21	Thimerosal	0.1% pet.
22	Ammoniated mercuric chloride	1% pet.
23	Formaldehyde	1% aq.
24	Kathon CG	100ppm aq.
Control		
25	Petrolatum (Sun White)	as is
26	Distilled Water	as is

Japanese standard allergens 2008

Test materials		Concentration/vehicle	Supplier
1	Cobalt chloride	1% pet.	Brial
2	PPD black rubber mix	0.6% pet.	Brial
		N-dimethyl-1, C-butyl-N'-phenyl-p-phenylenediamine 0.25% Diphenyl-p-phenylenediamine 0.25% N-Isopropyl-N'-phenyl-p-phenylenediamine 0.10%	
3	Gold sodium thiosulfate	0.5% pet.	Brial
4	Thiuram mix	1.25% pet.	Brial
		Tetramethylthiuram disulfide 0.25% Tetraethylthiuram disulfide 0.25% Tetramethylthiuram monosulfide 0.25% Dipentamethylenethiuram tetrasulfide 0.25% Tetrabutyl thiuram disulfide 0.25%	
5	Nickel sulfate	2.5% pet.	Brial
6	Mercapto mix	2% pet.	Brial
		N-Cyclohexyl-2-benzothiazylsulfenamide 0.5% Dibenzothiazyl disulfide 0.5% 2-Mercaptobenzothiazole 0.5% Moroholiny mercaptobenzothiazole 0.5%	
7	Dithiocarbamate mix	2% pet.	Brial
		Dimethyldithiocarbamic acid zinc salt 0.5% Diethyldithiocarbamic acid zinc salt 0.5% Di-n-butylthiocarbamic acid zinc salt 0.5% N-ethyl-N-phenylthiocarbamic acid zinc salt 0.5%	
8	Caine mix	7% pet.	Brial
		Benzocaine 5% Procaine-HCl 1% Conchocaine-HCl 1%	
9	Fradiomycin sulfate(Neomycin sulfate)	20% pet.	Brial
10	Balsam of Peru	25% pet.	Brial
11	Rosin( Colophony)	20% pet.	Brial
12	Fragrance mix	8% pet.	Brial
		Amylcinnamic aldehyde 1% Cinnamic aldehyde 1% Cinnamic alcohol 1% Eugenol 1% Geraniol 1% Hydroxycitronellal 1% Isoeugenol 1% Sandalwood oil 1%	
13	Paraben mix	15% pet.	Brial
		Methylparaben 3% Ethylparaben 3% Propylparaben 3% Butylparaben 3% Benzylparaben 3%	
14	p-Phenylenediamine	1% pet.	
15	Lanolin alcohols (Wool wax alcohols)	30% pet.	Brial
16	p-tert-Buthylphenol formaldehyde resin	1% pet.	Brial
17	Epoxy resin	1% pet.	Brial
18	Primin	0.01% pet.	Brial
19	Urushiol	0.02% pet.	Torii
20	Sesquiterpene lactone mix	0.1% pet.	Brial
		Alantolactone 0.03% Dehydrocostus lactone 0.03% Costunolide 0.03%	
21	Potassium dichromate	0.5% aq.	Torii
22	Thimerosal	0.05% pet.	Torii
23	Formaldehyde	1% aq.	Brial
24	Kathon CG	0.01% aq.	Brial
25	Mercuric chloride	0.05% aq.	Torii

Control

26	Petrolatum	as is	
27	Distilled Water	as is	

Japanese baseline series (JSA 2015)

Test materials		Content/patch (vehicle)	Supplier
1	Nickel Sulfat	0.16mg/81mm2(hydroxypropyl cellulose)	Sato
2	Lanolin alcohols (Wool wax alcohols)	0.81mg/81mm2(povidone)	Sato
3	Fradiomycin sulfate	0.49mg/81mm2(povidone)	Sato
4	Potassium dichromate	0.044mg/81mm2(povidone)	Sato
5	Caine mix	0.51mg/81mm2(povidone)	Sato
	Ethyl aminobezoate Dibucaine hydrochloride Tetracaine hydrochloride		Sato
6	Fragrance mix	0.402mg/81mm2 (povidone and $\beta$ -cyclodextrin)	Sato
	$\alpha$ -Amyl cinnamaldehyde		
	Isoeugenol		
	Cinnamaldehyde		
	Eugenol		
	Hydroxycitronellal Geraniol Oak moss		
7	Rosin( Colophony)	0.97mg/81mm2(povidone)	Sato
8	Paraben mix	0.80mg/81mm2(povidone)	Sato
	Methyl parahydroxybenzoate		
	Ethyl parahydroxybenzoate		
	Propyl parahydroxybenzoate		
	Butyl parahydroxybenzoate Benzyl parahydroxybenzoate		
9	Balsam of Peru	0.65mg/81mm2(povidone)	Sato
10	Gold sodium thiosulfate	0.061mg/81mm2(povidone)	Sato
11	Coblalt chloride	0.16mg/81mm2(hydroxypropyl cellulose)	Sato
12	p-tert-Buthylphenol formaldehyde resin	0.036mg/81mm2(hydroxypropyl cellulose)	Sato
13	Epoxy resin	0.041mg/81mm2(hydroxypropyl cellulose)	Sato
14	Dithiocarbamate mix	0.204mg/81mm2(hydroxypropyl cellulose)	Sato
	Diphenylguanidine		
	Zinc diethyldithiocarbamate Zinc dibutyldithiocarbamate		
15	PPD black rubber mix	0.060mg/81mm2(povidone)	Sato
	N-Isopropyl-N'-phenyl paraphenylenediamine		
	N-Cyclohexyl-N'-phenyl paraphenylenediamine		
	N,N'-Diphenyl paraphenylenediamine		
16	Isothiazolin mix	0.0032mg/81mm2(povidone)	Sato
	5-Chloro-2-methyl-4-isothiazolin-3-one 2-Methyl-4-isothiazolin-3-one		
17	Mercaptobenzothiazol	0.061mg/81mm2(povidone)	Sato
18	Paraphenylenediamine	0.065mg/81mm2(povidone)	Sato
19	Formaldehyde(N-hydroxymethylsuccinimide)	0.150mg(0.645mg)/81mm2(povidone)	Sato
20	Mercapto mix	0.060mg/81mm2(povidone)	Sato
	N-Cyclohexyl-2-benzothiazylsulfenamide		
	Dibenzothiazyl disulfide Moroholiny mercaptobenzothiazole		
21	Thirmerosal	0.0057mg/81mm2(povidone)	Sato
22	Thiuram mix	0.0022mg/81mm2(povidone)	Sato
	Tetramethylthiuram disulfide		
	Disulfiram		
	Tetramethylthiuram monosulfide Dipentamethylenethiuram disulfide		
23	Urushiol	0.02% pet.	Torii
24	Mercuric chloride	0.05% aq.	Torii

Control

25	Petrolatum	as is	
26	Distilled Water	as is	