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「三好鹿蔵製造のプレスガラス」他の訂正については第三十七号三〇頁、第四十一号三九頁を参照、また三十四号以降の別表中の原因を示唆する「虹彩」「油膜」「油污れ」の語を、現象のみを示す「干渉色」に改める。

## 三好鹿蔵製造のプレスガラス(四)

棚橋淳 二

### 十七 三好鹿蔵製造と推定されるプレスガラスの比重

(一) 三好鹿蔵の姓の陽刻されたもの

三好鹿蔵の姓がローマ字で MIYOSHI と陽刻された皿三枚の比重は表21に示すように二・四五—二・五〇で、小皿三枚の比重は二・四七—二・四八である。その平均はいずれも二・四七、変動係数はそれぞれ〇・九五六と〇・一九一である(表21参照)。

資料番号	資料名	寸法	比重	比重(数値2位内誤)	比重平均	比重変動係数	MIYOSHI の写真
No1970, 14A-B	菊/逆Sつなぎ文皿	D.14.7 <sup>cm</sup>	2.45	5×2	2.47	0.956	52
			2.50				"
No1984, 209	刺菊/逆Sつなぎ文小皿	D.12.4	2.47		2.47	0.191	53
No1989, 28	"	D.12.4	2.47				53(同じ)
No1990, 51	"	D.12.4	2.47				"

表21 三好鹿蔵の姓の陽刻されたプレスガラスの比重等

(二) 野々村藤助の登録商標等の陽刻されたもの

横菱の中に、野々村藤助の姓と名の頭文字に相当するNとTを、N・TまたはT・Nの順に品番とともに配した商標、および品番としてNo「付数字をその下に添えた登録商標（第一一六一三号）」が、それぞれ陽刻された器物の比重を表22に示す。配列は品番順とし、同一品番ではNoなしのものを先に、No「付を後に、またNoなしのものではN・Tを先にT・Nを後に掲げた。ちなみにNo「付品番が添えられているのは既述のように登録商標であるから、すべてT・Nの順である。

品番	商標	資料番号	資料名	寸法	比重	比重小数第2位内誤	比重平均	比重変動係数
1	N.T.	No1984.298A-B	菊つなぎ四つ割文小鉢	D.12.5 <sup>cm</sup>	2.5 <sub>1</sub>	1×2		
2	NT	No1970.11	星・旭光/アーチ付燵文皿	D.13.6	2.4 <sub>1</sub>			
		No1990.56	"	D.13.6	2.4 <sub>1</sub>			
		No1991.31	"	D.13.6	2.4 <sub>5</sub> *			
		No1992.50	"	D.13.6	2.3 <sub>9</sub>			
		No1993.32	"	D.13.5	2.4 <sub>1</sub>			
		No1993.42	"	D.13.5	2.4 <sub>0</sub>			
		No1984.261A-B	" (琥珀色)	D.13.6	2.4 <sub>8</sub>	6×2		
No3	T.N	No1977.76A-B	九曜・刺菊/燵文小皿	D.11.2	2.4 <sub>7</sub>	7×2		
		No1980.131	"	D.11.2	2.3 <sub>9</sub>			
		No1992.2A-B	"	D.11.2	2.4 <sub>0-1</sub>	0×1, 1×1		
4	NT	No1974.57A-C	十五曜・菊/ホフネイル文小皿	D.11.1	2.4 <sub>2-4</sub>	2×1, 3×1, 4×1	2.43	0.336

品番	商標	資料番号	資料名	寸法	比重	比重小数第2位内訳	比重平均	比重変動係数
5	NT	No.1982.186	剣菊/格子文皿	D.14.8 <sup>cm</sup>	2.5 <sub>3</sub>			
		No.1984.349A-E	"	D.14.8-9	2.4 <sub>6-7</sub>	6×3, 7×2	2.4 <sub>6</sub>	0.199
		No.1989.98A-D	"	D.14.8	2.3 <sub>7</sub>	7×4		
		98E	"	D.14.8	2.4 <sub>6</sub>			
7	T・N	No.1985.75	剣菊/丸菊文小皿	D.11.2	2.3 <sub>9</sub>			
8	N・T	No.1981.226A-E	旭光/縦筋・魚子文皿	D.13.4	2.4 <sub>9</sub> -2.5 <sub>1</sub>	9×2, 1×3	2.5 <sub>0</sub>	0.392
No.8	T・N	No.1990.59	"	D.14.5	2.3 <sub>7</sub>			
		No.1979.48	" (淡緑青色)	D.14.5	2.4 <sub>3</sub> *			
9*	N・T	No.1984.327A-B	星/楓文小皿	D. 8.3	2.5 <sub>3-4</sub>	3×1, 4×1		
		No.1992.52A-B	"	D. 8.3	2.4 <sub>6-8</sub>	6×1, 8×1		
11	NT	井上1	ねじ菊/四つ目市松八つ割文小皿	D.12.2	2.3 <sub>8</sub>			
12	NT	No.1991.33	四つ目市松八つ割文蓋物(身)	D.13.1	2.4 <sub>6</sub>			
		No.1992.32②	" (身)	D.13.0	2.4 <sub>4</sub>			
		32①	" (蓋)	D.10.6	2.4 <sub>4</sub>			
13	N・T	No.1990.26②	四つ目市松八つ割文蓋物(身)	D.12.9	2.5 <sub>4</sub>			
		26①	" (蓋)	D.10.7	2.5 <sub>6</sub>			
14	NT	井上2	菊/アーチ付霞文皿	D.16.6	2.5 <sub>2</sub>			
		No.1992.26	"	D.16.6	2.5 <sub>3</sub>			

品番	商標	資料番号	資料名	寸法	比重	比重小数第2位内訳	比重平均	比重変動係数
		No.1993.10A-H	菊/アーチ付霰文皿	D.16.6 <sup>*n</sup>	2.5 <sub>3-4</sub>	3×3, 4×5	2.54	0.191
15	<sup>製</sup> N・T	No.1992.56	剣菊/四つ目市松八つ割文皿	D.15.1	2.5 <sub>1</sub>			
	T・N	No.1983.74	"	D.15.1	2.5 <sub>2</sub>			
		No.1993.36	"	D.15.1	2.5 <sub>2</sub>			
17	TN	No.1980.6	星/梅花文小皿	D.10.7	2.4 <sub>6</sub>			
	T・N	No.1991.13A-K	"	D.10.8	2.4 <sub>5*-6</sub>	5*×1, 5×5, 6×5	2.45	0.203
	TN	No.1992.55A-D	"	D.10.7-8	2.3 <sub>9</sub>	9×4		
		55E-F	"	D.10.7	2.4 <sub>6-7</sub>	6×1, 7×1		
18	TN	No.1984.63	菊・水玉/アーチ付星文皿	D.14.1	2.4 <sub>0</sub>			
		No.1991.15	"	D.14.1	2.4 <sub>0</sub>			
20	NT	No.1989.17②	剣菊/格子に星つなぎ文蓋物(身)	D.13.4	2.4 <sub>5*</sub>			
		17①	" (蓋)	D.11.3	2.4 <sub>6</sub>			
		No.1991.1	" (身)	D.13.3	2.4 <sub>1</sub>			
23	TN	No.1986.36	旭光/宝珠文皿	D.15.0	2.4 <sub>6</sub>			
		No.1989.19A-H	"	D.15.0	2.4 <sub>4-5</sub>	4×6, 5*×1, 5×1	2.44	0.177
		No.1990.27A-I	"	D.15.0	2.4 <sub>2-3</sub>	2×3, 3×6	2.43	0.194
		No.1990.5A-E	" (緑青色)	D.15.0	2.4 <sub>8-9</sub>	8×4, 9×1	2.48	0.161
25	NT	No.1989.18A-E	九曜・宝珠つなぎ/アーチ付葉文小皿	D.12.0	2.4 <sub>3-6</sub>	5×1, 6×4	2.46	0.163

品番	商標	資料番号	資料名	寸法	比重	比重小数第2位内訳	比重平均	比重変動係数
No25	<sup>製12</sup> NT	No.1982.16	九曜・宝珠つなぎ/アーチ付薬文小皿	D.12.2 <sup>cm</sup>	2.3 <sub>9</sub>			
		No.1984.120	〃	D.12.2	2.3 <sub>9</sub>			
		No.1991.14	〃	D.12.2	2.4 <sub>9</sub>			
27	NT	No.1985.22	剣菊/霞・花卉文蓋物(身)	D.15.4	2.5 <sub>5</sub> *			
29*	NT	No.1982.104	籠目/籠目文楕円皿	D.14.8	2.4 <sub>6</sub>			
		No.1984.176	〃	D.14.8	2.4 <sub>7</sub>			
	N・T	No.1993.34	〃	D.14.8	2.4 <sub>5</sub> *			
31	T・N	井上3	剣菊/籠文楕円皿	D.15.9	2.4 <sub>2</sub>			
No31	T・N	No.1991.30A-D	〃	D.15.9 -16.0	2.4 <sub>7-8</sub>	7×3, 8×1	2.47	0.175
		No.1993.11A-C	〃	D.15.9 -16.0	2.4 <sub>7</sub>	7×3		
		No.1993.12A-D	〃 (黄緑色)	D.16.0-1	2.5 <sub>4</sub>	4×4		
35	TN	No.1984.69	剣菊/矢来・円文平鉢	D.15.7	2.4 <sub>9</sub>			
		No.1992.8	〃	D.15.9	2.5 <sub>0</sub>			
37	TN	No.1981.320	菊・剣菊/矢来文皿	D.17.6	2.5 <sub>4</sub>			
		No.1984.139	〃	D.17.6	2.5 <sub>2</sub>			
38	T・N	No.1984.144	剣菊/霞文小皿	D.10.2	2.3 <sub>7</sub>			
		No.1990.69A-I	〃	D.9.8	2.4 <sub>3-5</sub>	$\frac{3}{5} \times 1, \frac{4}{1.5} \times 6,$	2.44	0.232
		No.1992.9A-B	〃	D.9.8	2.4 <sub>2-3</sub>	2×1, 3×1		

品番	商標	資料番号	資料名	寸法	比重	比重小数第2位内訳	比重平均	比重変動係数
		No.1993.25	剣菊/霰文小皿	D.10.1 <sup>cm</sup>	2.4 <sub>2</sub>			
		No.1993.29A-I	"	D.10.2-3	2.3 <sub>8</sub> -2.4 <sub>0</sub>	8×2, 9×5, 0×2	2.39	0.279
		No.1993.33A-H	"	D.10.1-2	2.4 <sub>4-7</sub>	4×2, 5*×1, 6×2, 7×3	2.46	0.488
39	密に N・T	No.1990.72A-B	十一曜・8字つなぎ/あやめ文深皿	D.13.6	2.4 <sub>5</sub>	5×2		
No39	T・N	No.1989.101	"	D.13.6	2.3 <sub>9</sub>			
		No.1992.18A-F	"	D.13.6	2.3 <sub>8-9</sub>	8×1, 9×5	2.39	0.156
		No.1992.23	"	D.13.6	2.3 <sub>9</sub>			
		No.1992.29	"	D.13.6	2.4 <sub>4</sub>			
40	T・N	No.1984.291	剣菊/籠目に桜吹雪文鉢	D.18.5	2.3 <sub>8</sub>			
42	T N	No.1981.105	剣菊/籠目に桜吹雪文小鉢	D.12.4	2.4 <sub>5</sub>			
46	T N	No.1985.29②	剣菊/杉綾に遊戯文蓋物(身)	D.15.6	2.4 <sub>8</sub>			
		29①	" (蓋)	D.12.5	2.4 <sub>5</sub>			
48	T N	No.1982.84	十一曜・轡つなぎ/轡つなぎ文小鉢	D.12.5	2.4 <sub>4</sub>			
No51	T・N	No.1992.19A-E	貝尽し文コップ	H. 6.2	2.4 <sub>3-4</sub>	3×3, 4×2	2.43	0.201
52	T N	No.1984.269	篩目に葡萄文小コップ	H. 4.5	2.3 <sub>8</sub>			
55	T N	No.1985.31	剣菊/霰文小皿	D.12.1	2.4 <sub>5</sub>			
		No.1991.28A-E	"	D.12.1	2.5 <sub>1-2</sub>	1×2, 2×3	2.52	0.195*
		No.1993.17A-H	"	D.12.1	2.4 <sub>5-6</sub>	5×3, 6×5	2.46	0.197

品番	商標	資料番号	資料名	寸法	比重	比重小数第2位内訳	比重平均	比重変動係数
56	<sup>鏡に</sup> T・N	No.1984.331	剣菊/花卉文皿	D.15.3 <sup>cm</sup>	2.4 <sub>6</sub>			
No63	T・N	No.1991.43A-E	菊・ダイヤ/唐草四つ割文小皿	D.12.0	2.4 <sub>2</sub>	2×5		
		No.1992.4A-C	#	D.12.0	2.4 <sub>1-2</sub>	1×1, 2×2	2.42	0.195
		No.1992.40	#	D.12.0	2.3 <sub>7</sub>			
	T・N	No.1984.212	#	D.11.8	2.4 <sub>7</sub>			
		No.1984.268	#	D.11.8	2.3 <sub>8</sub>			
	T・N	No.1984.258	#	D.11.9	2.4 <sub>6</sub>			
	T・N	No.1993.9A-D	#	D.11.8	2.3 <sub>8-9</sub>	8×2, 9×2	2.39	0.210
No75	T・N	井上4	剣菊/四つ目市松文皿	D.15.9	2.3 <sub>9</sub>			
No76	T・N	No.1970.25A-J	十一曜・8字つなぎ/あやめ文皿	D.13.2	2.4 <sub>0-1</sub>	0×1, 1×9	2.41	0.125*
		No.1976.5	#	D.13.2	2.4 <sub>9</sub>			
		No.1983.147	#	D.13.2	2.4 <sub>2</sub>			
-	T・N	No.1984.177	十一曜・8字つなぎ/あやめ文小皿	D.10.9	2.4 <sub>3</sub>			

表22 野々村藤助の登録商標等の陽刻されたプレスガラスの比重等 比重平均は小数第3位を、比重変動係数は小数第4位をそれぞれ四捨五入した。「品番」欄の\*は鏡文字に、「比重」欄以下の\*は下位の値を五入した結果5となった場合に付す。他の諸表等についてもこれに準ずる。ちなみに蓋物の蓋には商標および品番の陽刻は施されていない。



十一「明治時代中後期におけるアルカリ石灰ガラス」の条で予測したように、表22に示した比重は生地の組成の多様さを反映して、かなりの変動がみられ、二・三七から二・五五に分布している。しかし同一品番のもの、特に組物としてまとまった状態で伝存したものの比重については、表22の「比重変動係数」欄に示したように、さほど大きな変動はみられない（数を揃えるため、異なる時期に製造されたもので、後年補充されている場合があることに留意が必要）。

表22を閲覧した限りでは、製造時期による比重の差は認め難く、例外もあるが、むしろ成形加工上、流動性の高いガラスが適している径の大きい平皿、径の割に深い鉢、彫りの深い文様の器などの中に、比較的比重の大きいものが見受けられるようである。例えば平皿では品番14（径一六・六cm）、品番37（径一七・六cm）の比重がそれぞれ二・五二四、二・五三四、鉢では品番1、品番13の比重がそれぞれ二・五二、二・五四一五、彫りの深い文様の器では品番55の一部の比重が二・五一一などを挙げることができる。

(三) 野々村藤助による登録意匠番号の陽刻されたもの

野々村藤助による登録意匠番号 NO. 2971 が陽刻されている羅針／A GOOD NAME. の文皿には、大きさの少しずつ異なるもの数種がある。これらの比重は表23に示すように二・四七一・五二に分布している。しかし同一の型で製造されたと推定される皿（No. 1993. 28A—B, No. 1993. 40A—C）の平均は二・五〇、その変動係数は〇・一六〇である。

資料番号	資料名	寸法	比重	比重小数 第2位内訳	比重平均	比重変動係数	意匠登録番号 の 互 異 真
No1990.38	羅針 / A GOOD NAME ... 文皿	D.13.9 <sub>cm</sub>	2.5 <sub>0</sub>				54に同じ
No1976.145	" (青色)	D.13.9	2.5 <sub>1</sub>				54
No1981.118	"	D.12.9	2.4 <sub>9</sub>				55
No1981.270	羅針 / A GOOD NAME ... 文小皿	D.9.7	2.5 <sub>0</sub>				56
No1992.28	"	D.11.1	2.4 <sub>7</sub>				117
No1993.28A-B	羅針 / A GOOD NAME ... 文皿	D.14.0	2.4 <sub>9</sub> -2.5 <sub>0</sub>	9×1, 0×1	} 2.50	} 0.160	118
No1993.40A-C	"	D.13.9-14.1	2.5 <sub>0</sub>	0×3			

表23 野々村藤助による登録意匠番号の陽刻されたプレスガラスの比重等

### 十八 三好鹿蔵(二代)製造のプレスガラス(推測されるものを含む)の比重

(一) 三好鹿蔵(二代)による登録意匠番号の陽刻されたもの

三好鹿蔵(二代)による登録意匠番号第二五九四八号(大正十三年七月十六日登録)が陽刻されている剣菊／富士壺文小皿の比重は表24にみられるように二・四七八で、登録意匠番号第二七八一一号(大正十四年六月十八日登録)が陽刻されているホブネイル／唐草文皿の比重は二・四九である。ほぼ同じ頃の製品のためか、管見し得た資料で見られる限り、比重に大きな違いはみられない。

資料番号	資 料 名	寸 法	比 重	比重小数第2位内訳	比重平均	比重変動係数	意匠登録番号 の 写真 真
No1983.122	剣菊 / 富士壺文小皿	D.10.6 <sup>cm</sup>	2.4 <sub>8</sub>				57
No1992. 20	* (金形 赤紫彩)	D.10.8	2.4 <sub>7</sub>				57に同じ
No1980.24	ホフネイル / 唐草文皿	D.14.4	2.4 <sub>9</sub>				58

表24 三好鹿蔵(二代)による登録意匠番号の陽刻されたプレスガラスの比重等

(二) 三好鹿蔵(二代)の登録商標ラベルの貼付されたもの

鹿蔵の商標ラベルの貼付されたものうち、前述の登録番号第二七八二一号に相当する文様であるホフネイル/唐草文大皿四枚の比重は、表25に示すように二・四七七八であり、その平均は二・四八、変動係数は〇・二〇二である。技法

資料番号	資 料 名	寸 法	比 重	比重小数第2位内訳	比重平均	比重変動係数	ラベルの写真
No1992.48A-F	剣菊 / 無文深皿	D.11.4-6 <sup>cm</sup>	2.4 <sub>8-9</sub>	8×5, 9×1	2.48	0.150	48
No1983.135A-F	剣菊 / 草花文小鉢	D.10.6-11.1	2.4 <sub>4-6</sub>	4×2, 5×2, 6×2	2.45	0.333	49
No1985.26	剣菊 / 格子文小角鉢	L.10.4	2.4 <sub>7</sub>				49に同じ
No1990.66A-E	*	L.10.3-4	2.4 <sub>7</sub>	7×5			*
No1990.12A-D	ホフネイル / 唐草文大皿	D.20.7-22.9	2.4 <sub>7-9</sub>	7×2, 8×2	2.48	0.202	50
No1989.44	複十字 / ニつ割筋文小鉢	D.11.7	2.5 <sub>1</sub>				51

表25 三好鹿蔵(二代)の登録商標ラベルの貼付されたプレスガラスの比重等

上、昭和時代に製造されたと思われる複十字／＼割筋文小鉢 (No. 1989, 44) の比重二・五一を除けば、他の器物の比重は二・四四―九に分布している (同表)。

(三) 野々村藤助の商標ラベルの貼付されたもの

野々村藤助の商標ラベルの貼付された大正三年 (一九一四) 頃の出荷と推定される格子に水玉／＼輪つなぎ文皿 (No. 1974, 37A-E) 五枚の比重は、表26に示すように二・四六七である。この五枚の皿と共にあった同じ文様の皿数十枚の比重は、今となつては知るよしもないが、外見上の品質は安定したものであったということが出来る。ちなみに五枚の皿の比重の平均は二・四六、変動係数は〇・一九九である。

資料番号	資料名	寸法	比重	比重小数第2位内訳	比重平均	比重変動係数	ラベルの写真
No.1974, 37A-E	格子に水玉／＼輪つなぎ文皿	D.14.2-3 <sup>mm</sup>	2.46 <sup>-7</sup>	6×3, 7×2	2.46	0.199	47

表26 野々村藤助の登録商標ラベルの貼付されたプレスガラスの比重等

十九 三好鹿蔵製造と推定されるプレスガラスの化学組成

化学分析に供した資料は三好鹿蔵の姓、MIYOSHI の陽刻のみられる剣菊／＼逆Sつなぎ文小皿 (No. 1990, 51) と

野々村藤助の商標、横菱にNT4の陽刻のみられる十五曜・菊／ホブネイル文小皿（No. 1974. 57C）で、いずれも大きく割れのはいったものである。化学分析は日本電気硝子株式会社の常務取締役和田正道氏の格別のご高配により、同社の研究所において行われた。

まず各小皿から小片を切り取り、蛍光X線分析装置を使用し、各試料の推定組成を得るための定性分析が行われ（表27参照）、次いで化学分析による定量分析が行われた（表28）。なお、日本電気硝子株式会社において行われた試

No. 1990. 51	No. 1974. 57C
Si	Si
Al	Al
Ca	Ca
Na	Na
K	K
—	Pb
Cl	Cl
S	S

表27 三好鹿蔵製造と推定される小皿の蛍光X線による定性分析結果（日本電気硝子株式会社による。）

	No. 1990. 51	No. 1974. 57C	
SiO <sub>2</sub>	70.5 %	76.3 %	重量法
Al <sub>2</sub> O <sub>3</sub>	3.3	0.9	原子吸光法
CaO	7.0	2.0	原子吸光法
Na <sub>2</sub> O	16.4	15.2	炎光光度法
K <sub>2</sub> O	2.0	2.7	原子吸光法
PbO	640 ppm	1.7	原子吸光法
MgO	70	70 ppm	原子吸光法
BaO	950	900	原子吸光法
ZnO	60	40	原子吸光法
SrO	—	—	原子吸光法
Li <sub>2</sub> O	20	30	原子吸光法
Fe <sub>2</sub> O <sub>3</sub>	620	410	吸光光度法
B <sub>2</sub> O <sub>3</sub>	—	—	容量法
Cl	5300	9600	イオンクロマト法
SO <sub>3</sub>	710	1300	イオンクロマト法
Br	550	130	イオンクロマト法

表28 三好鹿蔵製造と推定される小皿の化学分析による分析値（日本電気硝子株式会社による。）

料の分解方法・測定方法を表29に示す。

この分析結果について和田氏は現在の工業用ガラスとの比較において、以下の所見を寄せられた(文責棚橋)。  
 ①いずれのガラスにも酸化マグネシウム(MgO)以下の成分が同様に微量含有されている。

分析元素	分解方法・測定方法
SiO <sub>2</sub>	試料0.5gを白金金坩堝に秤り取り、炭酸ナトリウム3gを融剤として加え、電気炉で950℃20分間加熱融解後、塩酸脱水重量法でSiO <sub>2</sub> 測定
Al <sub>2</sub> O <sub>3</sub> CaO MgO Fe <sub>2</sub> O <sub>3</sub>	試料0.2gを白金皿に秤り取り、弗酸10ml、過塩素酸3ml硝酸1mlを加え、加熱分解乾固後、(1+1)塩酸20mlを加え融解200mlメスフラスコに定容 (Al <sub>2</sub> O <sub>3</sub> ) 20mlを分取、25mlに定容(塩化セシウム添加) (CaO) 5ml分取、50mlに定容(酸化ランタン添加) (MgO) 35ml分取、50mlに定容(酸化ランタン添加) 標準液に酸及びマトリックスを調整し、原子吸光法で測定 (Fe <sub>2</sub> O <sub>3</sub> ) 15ml分取、50mlに定容 オルトフェナントロリン吸光光度法にて測定
Na <sub>2</sub> O K <sub>2</sub> O PbO BaO ZnO SrO Li <sub>2</sub> O	試料0.4gを白金皿に秤り取り、弗酸10ml、過塩素酸3ml硝酸1mlを加え、加熱分解乾固後(1+1)硝酸20mlを加え、融解100mlメスフラスコに定容 (Na <sub>2</sub> O) 2ml分取、200mlに定容 標準液に、酸及びマトリックスを調整し、炎光光度法で測定 (K <sub>2</sub> O) 2mlを分取、200mlに定容 (PbO) 5mlを分取、100mlに定容 (BaO) 20ml分取、25mlに定容(塩化セシウム添加) (ZnO, Li <sub>2</sub> O, SrO) 原液にて測定 標準液に酸及びマトリックスを調整し、原子吸光にて測定
B <sub>2</sub> O <sub>3</sub>	試料0.3gを白金金坩堝に秤り取り、炭酸ナトリウム3gを融剤として加え、電気炉で950℃20分間加熱融解後200ccポリビーカーに移し、酸分解後ろ過し、マンニット添加後の中和容量滴定を行う

表29 三好鹿蔵製造と推定される小皿の化学分析のための分解方法・測定方法(日本電気硝子株式会社による。)

種 類	Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	Na <sub>2</sub> O	K <sub>2</sub> O	MgO	CaO	BaO	MnO
米国プレスガラス	0.67	0.06	74.57	19.84	—	—	4.55	—	0.13
独乙プレスガラス	0.38	0.04	74.67	19.14	0.41	—	5.14	—	—
＃	—	—	76.6	18.1	—	—	5.3	—	—
米国プレスガラス	0.11	0.19	75.0	18.62	—	0.52	5.18	—	0.38
独乙プレスガラス	0.38	0.04	75.83	17.52	0.12	—	5.98	—	—
米国プレスガラス	1.3	0.1	75.6	16.2	0.3	2.7	3.8	—	—
プレスガラス	0.25	0.05	74.82	13.86	4.05	0.05	6.63	—	—
独乙プレスガラス	0.41	0.04	75.13	16.41	1.11	—	5.68	1.11	—
＃	0.3	0.17	75.6	15.0	2.0	0.1	6.7	—	—
＃	0.8	0.01	76.8	13.7	2.0	—	5.6	1.2	—
プレスガラス	0.60	—	77.48	12.76	1.88	—	7.18	—	—
＃	0.41	—	75.34	14.38	2.14	0.13	7.20	—	—
プレスガラス	0.40	0.14	75.04	14.76	2.32	0.11	7.25	—	—
＃	0.71	0.05	75.75	12.42	3.81	—	7.41	—	—

表30 『ガラス工学ハンドブック』所載の「空洞ガラスおよびプレスガラス」の表にみられるプレスガラスの組成

②塩素 (Cl) が No. 1990. 51 や O・F118% No. 1974. 57C や O・九六%含有されているが、ソーダガラス系ではめずらしい。

③三酸化硫黄 (SO<sub>2</sub>) の含有量は原料由来の不純物程度である (硫酸塩を主原料としたのではない)。

④臭素 (Br) の検出は工業用ガラスでは例がない。原料に天然食塩が用いられたのではないか。

⑤No. 1974. 57C もソーダ石灰ガラスであるが、酸化カルシウム (CaO) が一部二酸化鉛 (PbO) で置換されており、めずらしい組成である。

原料として食塩を用いる調査は、十一「明治時代中後期におけるアルカリ石灰ガラス」の条で、二例を示した (表8、表13の153)。また酸化カルシウムの一部が一酸化鉛で置換される事例は、当時としてはさほど希なことではなかったようである。

明治時代においてもプレスガラスの化学分析は、各種研究機関において必要に応じて行われていたであろうが、それらの分析値はほとんど公表されることなく、その用を了えた後、廃棄された

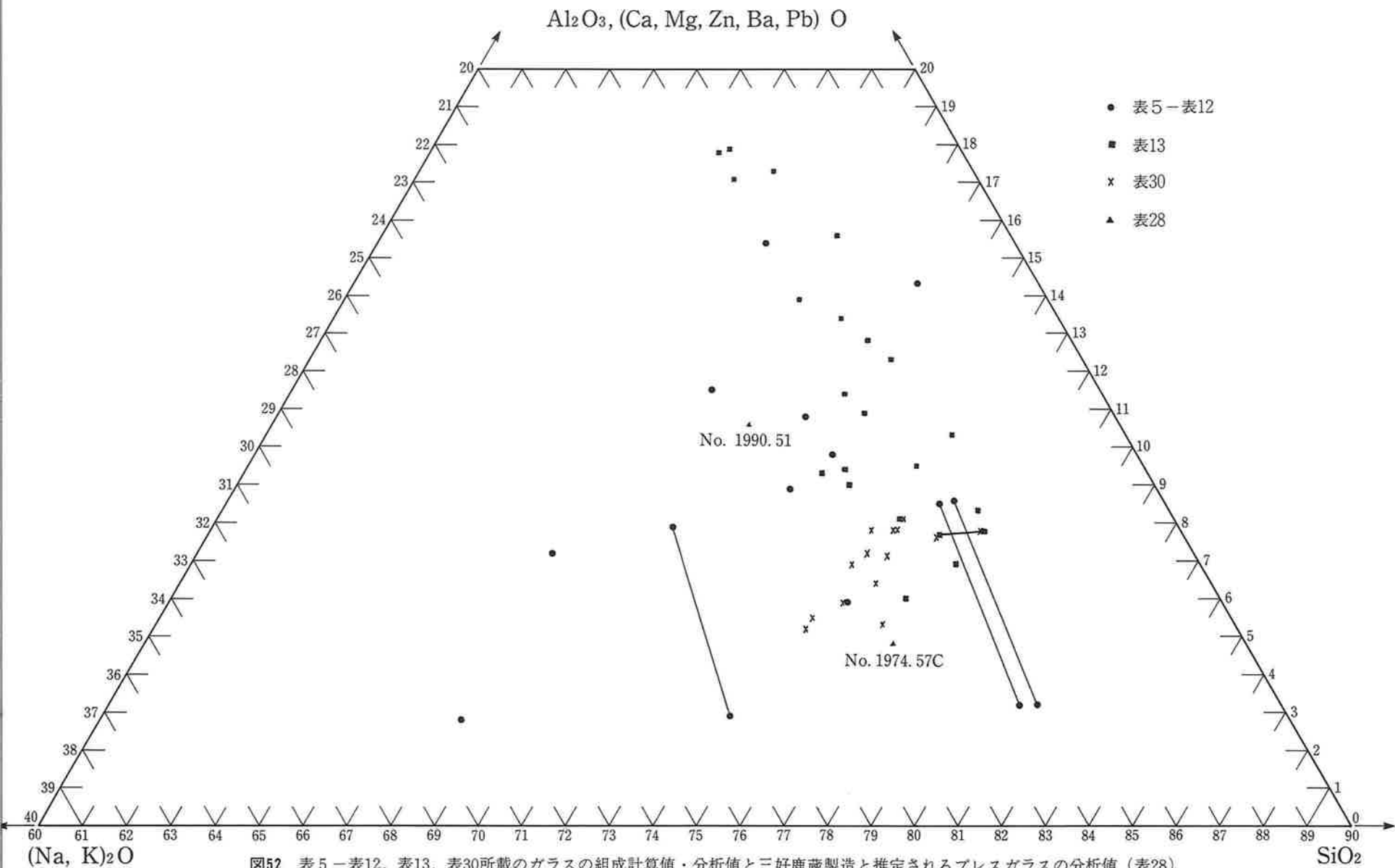


図52 表5-表12, 表13, 表30所載のガラスの組成計算値・分析値と三好鹿蔵製造と推定されるプレスガラスの分析値(表28)。



と推測されるし、また技術史研究以外の目的で明治時代のプレスガラスの化学分析を行う研究機関もないであろうから、現在利用可能な当時のプレスガラスの化学分析値はほとんど皆無といつてよい。したがって表28に示した鹿蔵製造と推定される小皿二枚の分析値を、同時代の他の国産プレスガラスの分析値と比較することは極めて困難である。

それ故、ここでは上記小皿二枚の分析値を表5から表13までの各表に示したプレスガラスの組成計算値もしくは分析値と比較することとし、また併せて「従来の容器ガラスの一般的組成」として、『ガラス工学ハンドブック』に掲載された「空洞ガラスおよびプレスガラス」の内、プレスガラスの分析値(表30)とも比較することにした。ちなみに表30の分析値は昭和二十七年刊行の『窯業工学ハンドブック』所載の「ガラス分析表」より転載されたもので、『窯業工学ハンドブック』においても個々のプレスガラスの分析値についての出典は明らかにされていない。

ただし上記小皿二枚の各成分、および表5から表13、表30に示した各成分は、多種にわたるため、比較に当ってはそれぞれを便宜上珪酸、アルカリ、ならびにアルミナ・アルカリ土類・亜鉛酸化物・鉛酸化物の三成分別に集計、百分率換算し、三角図表上に示した(図52)。この図から、例外はあるが表5から表12、および表30のガラスは概してアルカリ土類に代表される成分が少なく、表13のガラスは相対的にこれが多いことがわかる。

今回日本電気硝子株式会社において分析された二つの資料は、いずれも相対的にアルカリに富むが、MIYOSHIと陽刻のある小皿(No. 1990.51)は珪酸が少なくアルカリ土類に代表される成分に富み、横菱にNT4の陽刻のある小皿(No. 1974.57C)はこの関係が逆転している。即ち後者は、図52において表5から表12、および表30のガラスの多くが占める範囲内に位置しており、やや古い時代の製品のように思われる。

なお和田氏が指摘されているように、小皿二枚の分析値は微量成分が類似しており、このことは使用された原料が同

じである可能性が大きいことを暗示しているといえよう。またNT4の陽刻のある小皿は比重が二・四三であるが、一・七%の一酸化鉛を含んでいる。したがって同じくNT、TNの陽刻のみられる製品で、比重が二・五を越える一群のものは、かなりの一酸化鉛を含んでいる可能性がある。ちなみにF・E・ライト氏のフリントガラスにおける一酸化鉛含有量と密度との関係を示す図(図6)から読みとると、比重二・五で一酸化鉛約八%、比重二・五五で一酸化鉛約一%となる。もっとも『硝子製造法』所載の「押型用硝子」の調査第一例、第二例から試算した値では表12に示したように、一酸化鉛六・七九%でも比重が二・五五、一酸化鉛一〇・七五%では比重が二・六四にも達する。これは一酸化鉛の他に酸化カルシウムを含んでいるためである。N・T、T・Nの陽刻のみられる製品で、比重が二・五を越える一群のものも、基本的にはNT4の場合と同じくアルカリ石灰ガラスと推定されるので、一酸化鉛百分率は比重をもとに図6から読みとった値より多少小さいと考えた方がよいであろう。

#### 註

- (1) 郷田英輔「容器ガラス」(森谷太郎・成瀬省・功刀雅長・田代仁編『ガラス工学ハンドブック』、朝倉書店、昭和四十五年七版、初版は昭和三十八年)、六一七―六一九頁。
- (2) 窯業協会『窯業工学ハンドブック』(技報堂、昭和二十七年)、七九六―七九七頁。大阪府立中之島図書館蔵(777-317)。

資料番号	資料名	寸法	空气中重量 $W_1$ g	水中重量 $W_2$ g	$\frac{W_1}{W_1 - W_2}$	比重	備考
No.1970.11	星・旭光/アーチ付霰文皿	D.13.6 <sup>cm</sup>	178.3 178.3	104.3 104.3	2.409 2.409	2.4 <sub>1</sub>	NT 2
14A	菊/逆Sつなぎ文皿	D.14.7	181.3 181.4	107.4 107.4	2.453 2.451	2.4 <sub>5</sub>	MIYOSHI 陽刻：内側
14B	"	D.14.7	204.3 204.3	121.0 121.1	2.452 2.455	2.4 <sub>5</sub>	"
14C	"	D.14.7	161.0 161.1	96.7 96.8	2.503 2.505	2.5 <sub>0</sub>	" 種不足
25A	十一曜・8字つなぎ/あやめ文皿	D.13.2	182.8 182.9	106.9 106.9	2.408 2.406	2.4 <sub>1</sub>	T・N No.76
25B	"	D.13.2	185.3 185.4	108.4 108.5	2.409 2.410	2.4 <sub>1</sub>	"
25C	"	D.13.2	175.3 175.3	102.5 102.6	2.407 2.411	2.4 <sub>1</sub>	"
25D	"	D.13.2	173.4 173.5	101.4 101.4	2.408 2.406	2.4 <sub>1</sub>	"
25E	"	D.13.2	186.2 186.3	108.9 108.9	2.408 2.406	2.4 <sub>1</sub>	" 気泡
25F	"	D.13.2	172.9 172.9	101.1 101.1	2.408 2.408	2.4 <sub>1</sub>	" T：不明瞭
25G	"	D.13.2	172.5 172.5	100.7 100.8	2.402 2.405	2.4 <sub>0</sub>	" T：不明瞭
25H	"	D.13.2	186.9 186.9	109.3 109.3	2.408 2.408	2.4 <sub>1</sub>	"
25I	"	D.13.2	188.6 188.7	110.3 110.2	2.408 2.403	2.4 <sub>1</sub>	" 気泡 T：不明瞭
25J	"	D.13.2	172.6 172.7	101.0 101.0	2.410 2.408	2.4 <sub>1</sub>	" 気泡 T：不明瞭
No.1974.37A	格子に水玉/輪つなぎ文皿	D.14.2	148.8 148.9	88.4 88.5	2.463 2.465	2.4 <sub>6</sub>	T・NONOMURA (藍ラベル) ②番目のNは鏡文字

資料番号	資 料 名	寸 法	空气中重量 $W_1$	水中重量 $W_2$	$W_1 - W_2$	比 重	備 考
No1974.37B	格子に水玉/輪つなぎ文皿	D.14.3 <sup>cm</sup>	140.1 <sup>g</sup> 140.0	83.2 <sup>g</sup> 83.2	2.462 2.464	2.4 <sub>6</sub>	T・NONOMURA (鑑 ラベル) 2番目のNは鏡文字
37C	"	D.14.2	150.1 150.2	89.2 89.3	2.464 2.466	2.4 <sub>7</sub>	"
37D	"	D.14.2	140.8 140.9	83.7 83.7	2.465 2.463	2.4 <sub>6</sub>	"
37E	"	D.14.2	132.7 132.7	78.9 79.0	2.466 2.471	2.4 <sub>7</sub>	"
57A	十五曜・菊/ホブネイル文小皿	D.11.1	103.3 103.2	61.0 61.0	2.442 2.445	2.4 <sub>4</sub>	NT 4
57B	"	D.11.1	113.2 113.1	66.5 66.4	2.423 2.421	2.4 <sub>2</sub>	"
57C	"	D.11.1	114.7 114.7	67.4 67.5	2.424 2.430	2.4 <sub>3</sub>	" 鑿割 分析資料
No1976.5	十一曜・8字つなぎ/あやめ文皿	D.13.2	160.1 160.1	95.7 95.8	2.486 2.489	2.4 <sub>9</sub>	T・N No76 T:不明瞭
145	羅針/A GOOD NAME…文皿 (青色)	D.13.9	144.4 144.3	86.9 87.0	2.511 2.518	2.5 <sub>1</sub>	NO 2971(意匠登録) Nは鏡文字 陽刻:外 側
No1977.76A	九曜・剣菊/雷文小皿	D.11.2	134.4 134.3	80.0 80.0	2.470 2.473	2.4 <sub>7</sub>	T・N No3
76B	"	D.11.2	133.3 133.3	79.4 79.3	2.473 2.468	2.4 <sub>7</sub>	"
No1979.48	旭光/縦筋・魚子文皿 (淡緑青色)	D.14.5	191.0 191.0	113.0 112.9	2.448 2.445	2.4 <sub>5</sub> *	T・N No8 種不足
No1980.6	星/梅花文小皿	D.10.7	127.0 127.0	75.3 75.3	2.456 2.456	2.4 <sub>6</sub>	TN 17 (TN間に・の痕 跡)
24	ホブネイル/唐草文皿	D.14.4	144.6 144.6	86.4 86.5	2.484 2.488	2.4 <sub>9</sub>	NO 27811 (意匠登録) 陽刻:内側
131	九曜・剣菊/雷文小皿	D.11.2	127.2 127.1	73.9 73.8	2.386 2.384	2.3 <sub>9</sub>	T・N No3

資料番号	資 料 名	寸 法	空气中重量 $W_1$	水中重量 $W_2$	$W_1 - W_2$	比重	備 考
No.1981.105	剣菊/籠目に桜吹雪文小鉢	D.12.4 <sup>cm</sup>	209.8 209.9	124.3 124.3	2.453 2.452	2.4 <sub>5</sub>	TN 42
118	羅針/A GOOD NAME…文皿	D.12.9	102.6 102.6	61.3 61.4	2.484 2.490	2.4 <sub>9</sub>	NO 2971 (意匠登録) Nは鏡文字 陽刻：外側
226A	旭光/縦筋・魚文皿	D.13.4	195.8 195.9	117.8 117.8	2.510 2.508	2.5 <sub>1</sub>	N・T 8
226B	#	D.13.4	191.0 191.1	114.3 114.3	2.490 2.488	2.4 <sub>9</sub>	#
226C	#	D.13.4	203.1 203.1	122.1 122.1	2.507 2.507	2.5 <sub>1</sub>	#
226D	#	D.13.4	194.1 194.1	116.8 116.7	2.510 2.507	2.5 <sub>1</sub>	#
226E	#	D.13.4	188.3 188.3	112.7 112.6	2.490 2.487	2.4 <sub>9</sub>	#
270	羅針/A GOOD NAME…文小皿	D.9.7	64.6 64.7	38.7 38.8	2.494 2.498	2.5 <sub>0</sub>	NO 2971 (意匠登録) 陽刻：外側
320	菊・剣菊/矢来文皿	D.17.6	356.0 356.0	215.6 215.6	2.535 2.535	2.5 <sub>4</sub>	TN 37 気泡 ボンテ痕
No.1982.16	九曜・宝珠つなぎ/アーチ付葉文小皿	D.12.2	110.7 110.8	64.4 64.4	2.390 2.387	2.3 <sub>9</sub>	TN N <sub>Q</sub> 25
84	十一曜・響つなぎ/響つなぎ文小鉢	D.12.5	291.2 291.1	172.0 172.0	2.442 2.444	2.4 <sub>4</sub>	TN 48
104	籠目/籠目文楕円皿	D.14.8	218.3 218.2	129.7 129.7	2.463 2.465	2.4 <sub>6</sub>	NT 29 9は鏡文字 不明瞭
186	剣菊/格子文皿	D.14.8	332.6 332.5	201.0 201.0	2.527 2.528	2.5 <sub>3</sub>	NT 5
No.1983.74	剣菊/四つ目市松八つ割文皿	D.15.1	253.6 253.6	152.9 152.9	2.518 2.518	2.5 <sub>2</sub>	T・N 15 気泡 種不足
122	剣菊/富士壺文小皿	D.10.6	152.4 152.5	91.0 91.0	2.482 2.479	2.4 <sub>8</sub>	NO. 25948 (意匠登録) 陽刻：内側 高台研磨

資料番号	資料名	寸法	空气中重量 $W_1$	水中重量 $W_2$	$\frac{W_1}{W_1 - W_2}$	比重	備考
No1983.135A	剣菊/草花文小鉢	D.10.7 <sup>cm</sup>	219.9 <sup>g</sup> 220.0	129.8 <sup>g</sup> 129.9	2.440 2.441	2.4 <sub>4</sub>	S.MIYOSHI (茶ラベル)
135B	"	D.10.8	227.6 227.6	135.0 135.0	2.457 2.457	2.4 <sub>6</sub>	"
135C	"	D.10.8	227.3 227.4	134.8 134.7	2.457 2.453	2.4 <sub>6</sub>	"
135D	"	D.10.6	228.3 228.4	134.9 135.0	2.444 2.445	2.4 <sub>4</sub>	"
135E	"	D.11.1	233.9 233.9	138.6 138.6	2.454 2.454	2.4 <sub>5</sub>	"
135F	"	D.10.7	218.6 218.6	129.5 129.5	2.453 2.453	2.4 <sub>5</sub>	
147	十一曜・8字つなぎ/あやめ文皿	D.13.2	144.3 144.4	84.7 84.8	2.421 2.422	2.4 <sub>2</sub>	T・N No76
No1984.63	菊・水玉/アーチ付星文皿	D.14.1	256.4 256.4	149.7 149.6	2.402 2.400	2.4 <sub>0</sub>	TN 18 (13の可能性有)
69	剣菊/矢来・円文平鉢	D.15.7	376.9 377.0	225.3 225.3	2.486 2.485	2.4 <sub>9</sub>	TN 35 気泡
120	九曜・宝珠つなぎ/アーチ付薬文小皿	D.12.2	105.9 105.9	61.5 61.5	2.385 2.385	2.3 <sub>9</sub>	TN No25
139	菊・剣菊/矢来文皿	D.17.6	331.2 331.1	200.5 200.5	2.534 2.535	2.5 <sub>3</sub>	TN 37 7:不明瞭 ボンテ痕
144	剣菊/霞文小皿	D.10.2	111.6 111.6	64.4 64.5	2.364 2.369	2.3 <sub>7</sub>	T・N 38 気泡
176	籠目/籠目文楕円皿	D.14.8	217.0 217.0	129.0 129.0	2.465 2.465	2.4 <sub>7</sub>	NT 29 9は鏡文字 白石
177	十一曜・8字つなぎ/あやめ文小皿	D.10.9	128.4 128.5	75.5 75.5	2.427 2.424	2.4 <sub>3</sub>	T・N 一
209	剣菊/逆Sつなぎ文小皿	D.12.4	119.5 119.5	71.2 71.2	2.474 2.474	2.4 <sub>7</sub>	MIYOSHI 陽刻:内側

資料番号	資料名	寸法	空气中重量 $W_1$	水中重量 $W_2$	$\frac{W_1}{W_1 - W_2}$	比重	備考
No.1984.212	菊・ダイヤ/唐草四つ割文小皿	D.11.8 <sup>cm</sup>	122.2 122.2	72.7 <sup>g</sup> 72.7	2.468 2.468	2.4 <sub>7</sub>	T.N No63 No.1984.268に同じ
258	菊・ダイヤ/唐草四つ割文小皿	D.11.9	109.0 109.0	64.7 64.8	2.460 2.466	2.4 <sub>6</sub>	T.N No63
261A	星・旭光/アーチ付霰文皿 (琥珀色)	D.13.6	182.0 182.0	108.2 108.1	2.466 2.462	2.4 <sub>6</sub>	NT 2
261B	" ( " )	D.13.6	190.3 190.3	112.9 113.0	2.458 2.461	2.4 <sub>6</sub>	"
268	菊・ダイヤ/唐草四つ割文小皿	D.11.8	124.2 124.1	71.9 71.9	2.374 2.377	2.3 <sub>8</sub>	T.N No63
269	篩目に葡萄文小コップ	H.4.5	47.0 47.1	27.3 27.3	2.385 2.378	2.3 <sub>8</sub>	TN 52
291	剣菊/籠目に桜吹雪文鉢	D.18.5	417.3 417.3	242.3 242.4	2.384 2.385	2.3 <sub>8</sub>	T・N 40
298A	菊つなぎ四つ割文小鉢	D.12.5	263.8 263.8	158.5 158.5	2.505 2.505	2.5 <sub>1</sub>	N.T. 1
298B	"	D.12.5	251.0 150.9	151.1 151.1	2.512 2.514	2.5 <sub>1</sub>	"
327A	星/楓文小皿	D.8.3	59.1 59.1	35.7 35.7	2.525 2.525	2.5 <sub>2</sub>	N・T 9 9は鏡文字
327B	"	D.8.3	57.0 57.1	34.5 34.6	2.533 2.537	2.5 <sub>4</sub>	"
331	剣菊/花卉文皿	D.15.3	279.0 279.0	165.5 165.5	2.458 2.458	2.4 <sub>6</sub>	TN 56
349A	剣菊/格子文皿	D.14.8	302.0 301.9	179.5 179.4	2.465 2.464	2.4 <sub>6</sub>	NT 5 □縁研磨
349B	"	D.14.9	302.9 303.0	180.2 180.1	2.468 2.465	2.4 <sub>7</sub>	" □縁研磨
349C	"	D.14.9	292.5 292.4	173.7 173.7	2.462 2.463	2.4 <sub>6</sub>	" □縁研磨

資料番号	資料名	寸法	空气中重量 $W_1$ g	水中重量 $W_2$ g	$\frac{W_1}{W_1 - W_2}$	比重	備考
No.1984.349D	剣菊/格子文皿	D.14.8 <sup>cm</sup>	289.7 289.8	172.2 <sup>g</sup> 172.1	2.465 2.462	2.4 <sub>6</sub>	NT 5 気泡 □縁研磨
349E	〃	D.14.8	252.2 252.2	150.0 150.0	2.467 2.467	2.4 <sub>7</sub>	〃 □縁研磨
No.1985.22	剣菊/霰・花卉文蓋物(身)	D.15.4	385.4 385.4	234.2 234.2	2.548 2.548	2.5 <sub>5</sub> *	NT 27
26	剣菊/格子文小角鉢	L.10.4	161.6 161.7	96.2 96.3	2.470 2.472	2.4 <sub>7</sub>	S.MIYOSHI(茶ラベル)
29①	剣菊/杉綾に遊戯文蓋物(蓋)	D.12.5	228.3 228.3	135.3 135.3	2.454 2.454	2.4 <sub>5</sub>	—
29②	〃 (身)	D.15.6	356.5 356.5	212.9 212.9	2.482 2.482	2.4 <sub>9</sub>	TN 46
31	剣菊/霰文小皿	D12.1	166.5 166.6	98.6 98.7	2.452 2.453	2.4 <sub>5</sub>	TN 55
75	剣菊/丸菊文小皿	D.11.2	125.0 125.0	72.7 72.8	2.390 2.394	2.3 <sub>9</sub>	T・N 7
No.1986.36	旭光/宝珠文皿	D.15.0	240.0 240.0	142.6 142.6	2.464 2.464	2.4 <sub>6</sub>	TN 23 小欠
No.1989.17①	剣菊/格子に星つなぎ文蓋物(蓋)	D.11.3	142.0 142.0	84.2 84.2	2.456 2.456	2.4 <sub>6</sub>	—
17②	〃 (身)	D.13.4	289.1 289.2	171.1 171.1	2.450 2.448	2.4 <sub>5</sub> *	NT 20
18A	九曜・宝珠つなぎ/アーチ付葉文小皿	D.12.0	140.2 140.3	83.0 83.1	2.451 2.452	2.4 <sub>5</sub>	NT 25
18B	〃	D.12.0	158.2 158.3	94.0 93.9	2.464 2.458	2.4 <sub>6</sub>	〃
18C	〃	D.12.0	166.2 166.3	98.5 98.6	2.454 2.456	2.4 <sub>5</sub>	〃
18D	〃	D.12.0	136.0 136.0	80.7 80.7	2.459 2.459	2.4 <sub>6</sub>	〃



資料番号	資 料 名	寸 法	空气中重量 $W_1$	水中重量 $W_2$	$\frac{W_1}{W_1 - W_2}$	比 重	備 考
No.1989.18E	九曜・宝珠つなぎ/アーチ付葉文小皿	D.12.0 <sup>cm</sup>	151.7 <sup>g</sup> 151.6	90.1 <sup>g</sup> 90.1	2.462 2.465	2.4 <sub>6</sub>	NT 25 大欠
19A	旭光/宝珠文皿	D.15.0	254.8 254.7	150.6 150.5	2.445 2.444	2.4 <sub>4</sub>	TN 23
19B	〃	D.15.0	257.3 257.2	152.0 152.0	2.443 2.444	2.4 <sub>4</sub>	〃
19C	〃	D.15.0	208.9 208.9	123.3 123.2	2.440 2.437	2.4 <sub>4</sub>	〃 気泡 皺
19D	〃	D.15.0	193.0 193.0	114.2 114.2	2.449 2.449	2.4 <sub>5</sub> *	〃
19E	〃	D.15.0	260.2 260.1	153.7 153.7	2.443 2.444	2.4 <sub>4</sub>	〃
19F	〃	D.15.0	254.1 254.0	150.2 150.1	2.445 2.444	2.4 <sub>4</sub>	〃
19G	〃	D.15.0	261.7 261.7	155.0 155.0	2.452 2.452	2.4 <sub>5</sub>	〃 23：不明瞭
19H	〃	D.15.0	245.9 245.8	145.3 145.3	2.444 2.445	2.4 <sub>4</sub>	〃
28	剣菊/逆Sつなぎ文小皿	D.12.4	96.6 96.6	57.5 57.5	2.470 2.470	2.4 <sub>7</sub>	MIYOSHI 陽刻：内側 気泡
44	複十字/二つ割筋文小鉢	D.11.7	198.0 198.1	119.0 119.1	2.506 2.507	2.5 <sub>1</sub>	S.MIYOSHI… (褐色ラベル)
98A	剣菊/格子文皿	D.14.8	296.1 296.0	171.1 171.0	2.368 2.368	2.3 <sub>7</sub>	NT 5
98B	〃	D.14.8	304.5 304.5	176.0 176.0	2.369 2.369	2.3 <sub>7</sub>	〃
98C	〃	D.14.8	313.7 313.6	181.4 181.4	2.371 2.372	2.3 <sub>7</sub>	〃
98D	〃	D.14.8	308.7 308.7	178.6 178.5	2.372 2.370	2.3 <sub>7</sub>	〃

資料番号	資 料 名	寸 法	空气中重量 $W_1$	水中重量 $W_2$	$\frac{W_1}{W_1 - W_2}$	比 重	備 考
No1989.98E	劍菊/格子文皿	D.14.8 <sup>cm</sup>	305.2 <sup>g</sup> 305.2	181.0 <sup>g</sup> 180.9	2.457 2.455	2.4 <sub>6</sub>	NT 5
101	十一曜・8字つなぎ/あやめ文深皿	D.13.6	211.2 211.2	122.8 122.9	2.389 2.391	2.3 <sub>9</sub>	T・N No39
No1990.3	劍菊/長円に劍菊文大皿	D.24.7	897.6 897.5	541.1 541.2	2.517 2.518	2.5 <sub>2</sub>	英国の登録意匠記号 ポンテ痕 高台研磨
5 A	旭光/宝珠文皿 (緑青色)	D.15.0	237.1 237.2	141.5 141.6	2.480 2.481	2.4 <sub>8</sub>	TN 23
5 B	" ( " )	D.15.0	268.1 268.1	160.0 160.1	2.480 2.482	2.4 <sub>8</sub>	"
5 C	" ( " )	D.15.0	269.4 269.4	161.0 161.0	2.485 2.485	2.4 <sub>8</sub>	"
5 D	" ( " )	D.15.0	243.7 243.8	145.6 145.6	2.484 2.482	2.4 <sub>8</sub>	"
5 E	" ( " )	D.15.0	259.5 259.6	155.0 155.0	2.483 2.481	2.4 <sub>8</sub>	"
12A	ボブネイル/唐草文大皿	D.22.9	496.7 496.6	296.4 296.4	2.479 2.480	2.4 <sub>8</sub>	S.MIYOSHI (褐色ラ ベル)
12B	"	D.22.7	520.3 520.4	310.0 310.0	2.474 2.473	2.4 <sub>7</sub>	"
12C	"	D.22.9	523.1 523.0	312.2 312.3	2.480 2.482	2.4 <sub>8</sub>	
12D	"	D.22.7	539.2 539.2	321.0 321.1	2.471 2.472	2.4 <sub>7</sub>	気泡
26①	四つ目市松八つ割文蓋物 (蓋)	D.10.7	161.5 161.5	98.2 98.3	2.551 2.555	2.5 <sub>5</sub>	—
26②	" (身)	D.12.9	416.2 416.1	252.1 252.1	2.536 2.537	2.5 <sub>4</sub>	N・T 13
27A	旭光/宝珠文皿	D.15.0	218.2 218.2	128.0 128.0	2.419 2.419	2.4 <sub>2</sub>	TN 23

資料番号	資料名	寸法	空气中重量 $W_1$	水中重量 $W_2$	$\frac{W_1}{W_1 - W_2}$	比重	備考
No1990.27B	旭光/宝珠文皿	D.15.0 <sup>cm</sup>	217.1 <sup>g</sup> 217.1	127.7 <sup>g</sup> 127.8	2.428 2.431	2.4 <sub>3</sub>	TN 23 小欠
27C	"	D.15.0	224.2 224.1	131.8 131.9	2.426 2.430	2.4 <sub>3</sub>	"
27D	"	D.15.0	219.2 219.2	128.7 128.7	2.422 2.422	2.4 <sub>2</sub>	"
27E	"	D.15.0	219.2 219.3	128.8 128.9	2.424 2.425	2.4 <sub>2</sub>	"
27F	"	D.15.0	212.7 212.7	125.1 125.2	2.428 2.430	2.4 <sub>3</sub>	"
27G	"	D.15.0	214.4 214.4	126.3 126.2	2.433 2.430	2.4 <sub>3</sub>	" 白膜
27H	"	D.15.0	211.7 211.7	124.6 124.6	2.430 2.430	2.4 <sub>3</sub>	"
27I	"	D.15.0	206.9 206.9	121.7 121.7	2.428 2.428	2.4 <sub>3</sub>	"
38	羅針/A GOOD NAME…文皿	D.13.9	132.9 132.8	79.7 79.8	2.498 2.505	2.5 <sub>0</sub>	NO 2971 (意匠登録) Nは鏡文字 陽刻：外側 小気泡
51	剣菊/逆Sつなぎ文小皿	D.12.4	109.9 109.9	65.5 65.6	2.475 2.480	2.4 <sub>8</sub>	MIYOSHI 陽刻：内側 鏽割 分析資料
56	星・旭光/アーチ付霞文皿	D.13.6	196.4 196.4	114.9 114.9	2.409 2.409	2.4 <sub>1</sub>	NT 2
59	旭光/縦筋・魚子文皿	D.14.5	202.5 202.5	117.0 117.0	2.368 2.368	2.3 <sub>7</sub>	T・N No 8 鏽割
66A	剣菊/格子文小角鉢	L.10.4	156.2 156.3	93.0 93.0	2.471 2.469	2.4 <sub>7</sub>	No1985.26と同じ茶ラベルの一部残存
66B	"	L.10.3	166.7 166.7	99.3 99.3	2.473 2.473	2.4 <sub>7</sub>	
66C	"	L.10.4	155.5 155.6	92.6 92.6	2.472 2.469	2.4 <sub>7</sub>	

資料番号	資 料 名	寸 法	空气中重量 $W_1$	水中重量 $W_2$	$\frac{W_1}{W_1 - W_2}$	比 重	備 考
Na1990.66D	剣菊/格子文小角鉢	L.10.3	161.8 161.9	96.3 96.4	2.470 2.471	2.4 <sub>7</sub>	
66E	"	L.10.3	147.1 147.2	87.6 87.6	2.472 2.469	2.4 <sub>7</sub>	
69A	剣菊/霰文小皿	D.9.8	85.3 85.4	50.4 50.4	2.444 2.440	2.4 <sub>4</sub>	T・N 38
69B	"	D.9.8	96.6 96.7	57.1 57.1	2.445 2.441	2.4 <sub>4</sub>	"
69C	"	D.9.8	81.1 81.2	47.8 47.9	2.435 2.438	2.4 <sub>4</sub>	"
69D	"	D.9.8	98.0 98.1	57.9 58.0	2.443 2.446	2.4 <sub>4</sub>	"
69E	"	D.9.8	73.0 73.1	43.0 43.1	2.433 2.436	2.4 <sub>3</sub>	"
69F	"	D.9.8	79.3 79.4	46.9 47.0	2.447 2.450	2.4 <sub>5</sub> *	"
69G	"	D.9.8	78.2 78.3	46.2 46.2	2.443 2.439	2.4 <sub>4</sub>	"
69H	"	D.9.8	82.5 82.5	48.8 48.9	2.448 2.455	2.4 <sub>5</sub>	"
69I	"	D.9.8	73.3 73.4	43.3 43.3	2.443 2.438	2.4 <sub>4</sub>	"
72A	十一曜・8字つなぎ/あやめ文深皿	D.13.6	248.2 248.2	146.9 146.9	2.450 2.450	2.4 <sub>5</sub>	N・T 39
72B	"	D.13.6	261.2 261.3	154.7 154.8	2.452 2.453	2.4 <sub>5</sub>	"
Na1991.1	剣菊/格子に星つなぎ文蓋物(身)	D.13.3	264.3 264.4	154.8 154.9	2.413 2.414	2.4 <sub>1</sub>	NT 20
13A	星/梅花文小皿	D.10.8	123.6 123.6	73.4 73.4	2.462 2.462	2.4 <sub>6</sub>	T・N 17

資料番号	資 料 名	寸 法	空气中重量 $W_1$	水中重量 $W_2$	$\frac{W_1}{W_1 - W_2}$	比 重	備 考
No.1991.13B	星/梅花文小皿	D.10.8	128.3 <sup>g</sup> 128.3	76.1 <sup>g</sup> 76.0	2.457 2.453	2.4 <sub>6</sub>	T・N 17
13C	■	D.10.8	112.6 112.6	66.7 66.7	2.453 2.453	2.4 <sub>5</sub>	〃 小気泡
13D	■	D.10.8	108.6 108.6	64.4 64.3	2.457 2.451	2.4 <sub>5</sub>	〃
13E	〃	D.10.8	113.6 113.5	67.3 67.3	2.453 2.456	2.4 <sub>5</sub>	〃
13F	〃	D.10.8	110.0 110.0	65.2 65.2	2.455 2.455	2.4 <sub>6</sub>	〃
13G	〃	D.10.8	118.1 118.1	70.1 70.0	2.460 2.455	2.4 <sub>6</sub>	〃
13H	〃	D.10.8	109.3 109.3	64.8 64.7	2.456 2.450	2.4 <sub>5</sub>	〃
13I	〃	D.10.8	111.0 111.1	65.9 65.9	2.461 2.457	2.4 <sub>6</sub>	〃
13J	〃	D.10.8	109.7 109.7	65.0 65.0	2.454 2.454	2.4 <sub>5</sub>	〃 不明瞭
13K	〃	D.10.8	112.5 112.6	66.6 66.6	2.450 2.447	2.4 <sub>6</sub> *	〃 不明瞭 気泡
14	丸曜・宝珠つなぎ/アーチ付葉文小皿	D.12.2	123.2 123.1	73.7 73.7	2.488 2.491	2.4 <sub>9</sub>	TN No25
15	菊・水玉/アーチ付星文皿	D.14.1	229.7 229.7	134.0 134.1	2.400 2.402	2.4 <sub>6</sub>	TN 18(13の可能性有)
28A	剣菊/霞文小皿	D.12.1	164.9 164.9	99.5 99.4	2.521 2.517	2.5 <sub>2</sub>	TN 55 小気泡
28B	■	D.12.1	168.0 168.0	101.1 101.1	2.511 2.511	2.5 <sub>1</sub>	〃
28C	〃	D.12.1	143.1 143.1	86.4 86.3	2.523 2.519	2.5 <sub>2</sub>	〃 虹彩

資料番号	資料名	寸法	空气中重量 $W_1$	水中重量 $W_2$	$\frac{W_1}{W_1 - W_2}$	比重	備考
No1991.28D	剣菊/霰文小皿	D.12.1	169.3 169.2	101.9 <sup>g</sup> 101.8 <sup>g</sup>	2.511 2.510	2.5 <sub>1</sub>	TN 55
28E	〃	D.12.1	164.1 164.0	99.0 98.9	2.520 2.519	2.5 <sub>2</sub>	〃
30A	剣菊/籠文楕円皿	D.16.0	227.5 227.6	135.7 135.6	2.478 2.473	2.4 <sub>6</sub>	T. N No31
30B	〃	D.15.9	225.6 225.6	134.3 134.3	2.470 2.470	2.4 <sub>7</sub>	〃 気泡
30C	〃	D.16.0	223.3 223.4	133.0 133.1	2.472 2.473	2.4 <sub>7</sub>	〃
30D	〃	D.15.9	236.3 236.4	140.5 140.6	2.466 2.467	2.4 <sub>7</sub>	〃
31	星・旭光/アーチ付霰文皿	D.13.6	197.0 197.0	116.5 116.5	2.447 2.447	2.4 <sub>5</sub> *	NT 2
33	四つ目市松八つ割文蓋物(身)	D.13.1	359.6 359.6	213.6 213.6	2.463 2.463	2.4 <sub>6</sub>	NT 12
43A	菊・ダイヤ/唐草四つ割文小皿	D.12.0	141.5 141.6	83.0 83.1	2.418 2.420	2.4 <sub>2</sub>	T・N No63
43B	〃	D.12.0	137.7 137.7	80.7 80.8	2.415 2.420	2.4 <sub>2</sub>	〃
43C	〃	D.12.0	133.0 133.1	78.0 78.0	2.418 2.415	2.4 <sub>2</sub>	〃
43D	〃	D.12.0	132.5 132.6	77.7 77.7	2.417 2.415	2.4 <sub>2</sub>	〃
43E	〃	D.12.0	125.1 125.2	73.4 73.5	2.419 2.421	2.4 <sub>2</sub>	〃
No1992.2A	九曜・剣菊/雷文小皿	D.11.2	132.7 132.8	77.4 77.5	2.399 2.401	2.4 <sub>0</sub>	T. N No 3
2B	〃	D.11.2	136.7 136.8	80.0 80.0	2.410 2.408	2.4 <sub>1</sub>	〃

資料番号	資 料 名	寸 法	空气中重量 $W_1$	水中重量 $W_2$	$\frac{W_1}{W_1 - W_2}$	比 重	備 考
No1992.4A	菊・ダイヤ/唐草四つ割文小皿	D.12.0 <sup>cm</sup>	134.4 <sup>g</sup> 134.5	78.8 <sup>g</sup> 78.9	2.417 2.419	2.4 <sub>2</sub>	T・N No63 小欠 気泡 No.1991.43に同じ
4B	"	D.12.0	107.2 107.2	62.6 62.7	2.403 2.408	2.4 <sub>1</sub>	" 小欠
4C	"	D.12.0	130.0 130.1	76.3 76.4	2.420 2.422	2.4 <sub>2</sub>	" 小欠 鱗割
7	八重菊/輪つなぎ文大皿	D.25.6	755.7 755.8	462.7 462.6	2.579 2.577	2.5 <sub>9</sub>	英国の意匠登録記号 高台研磨 箱書：明治12年購求
8	剣菊/矢来・円文平鉢	D.15.9	409.0 409.1	245.4 245.5	2.500 2.500	2.5 <sub>0</sub>	TN 35
9A	剣菊/霞文小皿	D.9.8	84.0 84.0	49.3 49.4	2.420 2.427	2.4 <sub>2</sub>	T・N 38
9B	"	D.9.8	87.1 87.2	51.2 51.3	2.426 2.428	2.4 <sub>3</sub>	"
18A	十一曜・8字つなぎ/あやめ文深皿	D.13.6	188.2 188.2	109.4 109.4	2.388 2.388	2.3 <sub>9</sub>	TN No39 気泡
18B	"	D.13.6	202.0 202.0	117.4 117.4	2.387 2.387	2.3 <sub>9</sub>	"
18C	"	D.13.6	242.6 242.7	141.1 141.2	2.390 2.391	2.3 <sub>9</sub>	"
18D	"	D.13.6	193.4 193.4	112.5 112.5	2.390 2.390	2.3 <sub>9</sub>	" 小気泡
18E	"	D.13.6	216.4 216.3	125.5 125.5	2.380 2.382	2.3 <sub>9</sub>	" (TN間に・の 痕跡) 気泡
18F	"	D.13.6	206.7 206.7	120.2 120.2	2.389 2.389	2.3 <sub>9</sub>	" (TN間に・の 痕跡) 虹彩
19A	貝尽し文コップ	H.6.2	115.3 115.3	68.0 68.0	2.437 2.437	2.4 <sub>4</sub>	T・N No51 気泡
19B	"	H.6.2	117.4 117.5	69.2 69.3	2.435 2.437	2.4 <sub>4</sub>	"

資料番号	資料名	寸法	空气中重量 W <sub>1</sub>	水中重量 W <sub>2</sub>	$\frac{W_1}{W_1 - W_2}$	比重	備考
No1992.19C	貝尽し文コップ	H.6.2 <sup>cm</sup>	122.8 <sup>g</sup> 122.9	72.3 <sup>g</sup> 72.3	2.431 2.428	2.4 <sub>3</sub>	T・N No51
19D	〃	H.6.2	117.0 117.0	68.9 68.8	2.432 2.427	2.4 <sub>3</sub>	# 気泡
19E	〃	H.6.2	107.1 107.2	63.1 63.1	2.434 2.430	2.4 <sub>3</sub>	〃 気泡種 不足
20	剣菊/富士壺文小皿 (金彩・赤紫彩)	D.10.8	124.7 124.6	74.1 74.1	2.464 2.467	2.4 <sub>7</sub>	NO. 25948 (意匠登録) 陽刻：内側 高台研磨
23	十一曜・8字つなぎ/あやめ文深皿	D.13.6	233.5 233.5	135.7 135.7	2.387 2.387	2.3 <sub>9</sub>	T・N No39 気泡
26	菊/アーチ付霰文皿	D.16.6	365.0 365.0	220.6 220.6	2.527 2.527	2.5 <sub>9</sub>	NT 14
28	羅針/A GOOD NAME…文小皿	D.11.1	66.6 66.6	39.7 39.6	2.475 2.466	2.4 <sub>7</sub>	NO 2971 (意匠登録) Nは鏡文字 陽刻：外側
29	十一曜・8字つなぎ/あやめ文深皿	D.13.6	238.1 238.2	140.5 140.5	2.439 2.438	2.4 <sub>4</sub>	T・N No39
32①	四つ目市松八つ割文蓋物 (蓋)	D.10.6	159.9 159.9	94.4 94.4	2.441 2.441	2.4 <sub>4</sub>	—
32②	〃 (身)	D.13.0	347.5 347.5	204.9 204.9	2.436 2.436	2.4 <sub>4</sub>	NT 12
40	菊・ダイヤ/唐草四つ割文小皿	D.12.0	119.4 119.5	69.0 69.0	2.369 2.366	2.3 <sub>7</sub>	T・N No63 罫割 No1991.43に同じ
48A	剣菊/無文深皿	D.11.5	143.2 143.2	85.6 85.7	2.486 2.490	2.4 <sub>9</sub>	S, MIYOSHI (藍ラベル)
48B	〃	D.11.5	144.5 144.6	86.3 86.4	2.482 2.484	2.4 <sub>9</sub>	
48C	〃	D.11.6	128.4 128.4	76.5 76.6	2.473 2.478	2.4 <sub>9</sub>	
48D	〃	D.11.5	134.0 134.1	80.0 80.0	2.481 2.478	2.4 <sub>8</sub>	気泡



資料番号	資 料 名	寸 法	空気中重量 $W_1$ g	水中重量 $W_2$ g	$\frac{W_1}{W_1 - W_2}$	比 重	備 考
No1992.48E	剣菊/無文深皿	D.11.5 <sup>cm</sup>	147.1 147.1	87.8 87.8	2.480 2.480	2.4 <sub>9</sub>	小気泡
48F	"	D.11.4	134.4 134.4	80.2 80.2	2.479 2.479	2.4 <sub>8</sub>	小気泡
50	星・旭光/アーチ付霰文皿	D.13.6	189.9 190.0	110.5 110.5	2.391 2.389	2.3 <sub>9</sub>	NT 2
52A	星/楓文小皿	D.8.3	68.7 68.8	41.0 41.0	2.480 2.474	2.4 <sub>8</sub>	N・T 9 9は鏡文字 小気泡
52B	"	D.8.3	62.3 62.4	37.0 37.1	2.462 2.466	2.4 <sub>6</sub>	" 小気泡
55A	星/梅花文小皿	D.10.7	109.7 109.8	63.8 63.9	2.389 2.392	2.3 <sub>9</sub>	TN 17 不明瞭 小欠
55B	"	D.10.8	102.2 102.2	59.4 59.5	2.387 2.393	2.3 <sub>9</sub>	" 不明瞭 小欠
55C	"	D.10.8	116.0 116.0	67.4 67.5	2.386 2.391	2.3 <sub>9</sub>	" 不明瞭 小気泡 小欠
55D	"	D.10.7	122.0 122.0	71.0 71.0	2.392 2.392	2.3 <sub>9</sub>	" 不明瞭 小気泡 小欠
55E	"	D.10.7	120.2 120.3	71.5 71.5	2.468 2.465	2.4 <sub>7</sub>	" 不明瞭 小欠
55F	"	D.10.7	116.5 116.5	69.1 69.2	2.457 2.463	2.4 <sub>6</sub>	" 不明瞭 小欠
56	剣菊/四つ目市松八つ割文皿	D.15.1	227.6 227.6	137.0 137.0	2.512 2.512	2.5 <sub>1</sub>	N・T 15 大気泡 白石
No1993.9A	菊・ダイヤ/唐草四つ割文小皿	D.11.8	148.0 148.1	86.0 86.1	2.387 2.388	2.3 <sub>9</sub>	T, N No63 小気泡
9B	"	D.11.8	148.9 148.9	86.5 86.6	2.386 2.390	2.3 <sub>9</sub>	"
9C	"	D.11.8	134.6 134.6	78.1 78.2	2.382 2.386	2.3 <sub>8</sub>	" 小気泡

資料番号	資料名	寸法	空气中重量 W <sub>1</sub>	水中重量 W <sub>2</sub>	$\frac{W_1}{W_1 - W_2}$	比重	備考
No.1993.9D	菊・ダイヤ/唐草四つ割文小皿	D.11.8 <sup>cm</sup>	142.1 <sup>g</sup> 142.1	82.5 <sup>g</sup> 82.5	$\frac{2.384}{2.384}$	2.3 <sub>8</sub>	T. N No <sub>63</sub> 小欠
10A	菊/アーチ付霞文皿	D.16.6	328.3 328.4	199.0 199.0	$\frac{2.539}{2.537}$	2.5 <sub>4</sub>	NT 14 小気泡
10B	"	D.16.6	367.9 367.9	223.0 223.1	$\frac{2.538}{2.540}$	2.5 <sub>4</sub>	" 小欠
10C	"	D.16.6	298.1 298.0	180.6 180.6	$\frac{2.537}{2.538}$	2.5 <sub>4</sub>	"
10D	"	D.16.6	343.7 343.8	208.5 208.6	$\frac{2.542}{2.542}$	2.5 <sub>4</sub>	" 小欠
10E	"	D.16.6	426.9 427.0	257.9 257.9	$\frac{2.526}{2.525}$	2.5 <sub>8</sub>	" 小気泡
10F	"	D.16.6	332.2 332.2	201.5 201.5	$\frac{2.541}{2.541}$	2.5 <sub>4</sub>	" 破損 小気泡
10G	"	D.16.6	354.4 354.5	214.1 214.2	$\frac{2.526}{2.526}$	2.5 <sub>8</sub>	" 破損 小気泡
10H	"	D.16.6	302.7 302.8	183.2 183.3	$\frac{2.533}{2.533}$	2.5 <sub>8</sub>	" 破損
11A	剣菊/籠文楕円皿	D.15.9	206.0 206.0	122.7 122.7	$\frac{2.472}{2.472}$	2.4 <sub>7</sub>	T. N No <sub>31</sub>
11B	"	D.16.0	203.4 203.4	121.2 121.2	$\frac{2.474}{2.474}$	2.4 <sub>7</sub>	"
11C	"	D.16.0	200.7 200.7	119.5 119.6	$\frac{2.471}{2.474}$	2.4 <sub>7</sub>	"
12A	剣菊/籠文楕円皿 (黄緑色)	D.16.0	236.5 236.5	143.3 143.3	$\frac{2.537}{2.537}$	2.5 <sub>4</sub>	T. N No <sub>31</sub> 小気泡
12B	" ( " )	D.16.0	229.9 230.0	139.3 139.3	$\frac{2.537}{2.535}$	2.5 <sub>4</sub>	" 小気泡
12C	" ( " )	D.16.1	230.2 230.2	139.4 139.4	$\frac{2.535}{2.535}$	2.5 <sub>4</sub>	" 小気泡

資料番号	資 料 名	寸 法	空气中重量 $W_1$	水中重量 $W_2$	$\frac{W_1}{W_1 - W_2}$	比 重	備 考
No.1993.12D	劍菊/籠文梅円皿 (黄緑色)	D.16.0 <sup>cm</sup>	228.7 <sup>R</sup> 228.7	138.6 <sup>R</sup> 138.6	2.538 2.538	2.5 <sub>4</sub>	T・N No31 小気泡
17A	劍菊/霞文小皿	D.12.1	160.2 160.3	95.0 95.1	2.457 2.458	2.4 <sub>6</sub>	TN 55 気泡
17B	"	D.12.1	177.6 177.7	105.4 105.4	2.459 2.457	2.4 <sub>6</sub>	"
17C	"	D.12.1	185.3 185.4	109.9 109.9	2.457 2.455	2.4 <sub>6</sub>	" 気泡
17D	"	D.12.1	179.2 179.3	106.1 106.2	2.451 2.452	2.4 <sub>5</sub>	"
17E	"	D.12.1	181.7 181.7	107.6 107.6	2.452 2.452	2.4 <sub>5</sub>	" 気泡
17F	"	D.12.1	168.3 168.4	99.9 100.0	2.460 2.461	2.4 <sub>6</sub>	"
17G	"	D.12.1	184.1 184.2	109.2 109.2	2.457 2.456	2.4 <sub>6</sub>	"
17H	"	D.12.1	181.9 182.0	107.7 107.7	2.451 2.449	2.4 <sub>5</sub>	" 白膜
25	劍菊/霞文小皿	D.10.1	97.7 97.7	57.3 57.4	2.418 2.424	2.4 <sub>2</sub>	T・N 38
28A	羅針/A GOOD NAME…文皿	D.14.0	147.0 147.0	88.0 88.0	2.491 2.491	2.4 <sub>9</sub>	No 2971 (意匠登録) 陽刻：外側
28B	"	D.14.0	147.6 147.6	88.4 88.5	2.493 2.497	2.5 <sub>0</sub>	"
29A	劍菊/霞文小皿	D.10.3	130.3 130.4	76.0 75.9	2.399 2.392	2.4 <sub>0</sub>	T・N 38
29B	"	D.10.3	93.2 93.2	54.0 54.0	2.377 2.377	2.3 <sub>6</sub>	" 気泡
29C	"	D.10.3	111.7 111.8	64.9 65.0	2.386 2.388	2.3 <sub>9</sub>	"

資料番号	資 料 名	寸 法	空气中重量 $W_1$	水中重量 $W_2$	$\frac{W_1}{W_1 - W_2}$	比重	備 考
No.1993.29D	劍菊/霰文小皿	D.10.3 <sup>cm</sup>	127.0 <sup>g</sup> 127.1	74.0 <sup>g</sup> 74.0	2.396 2.393	2.3 <sub>9</sub>	T・N 38 気泡 白濁 脈理
29E	〃	D.10.3	125.1 125.1	72.9 72.9	2.396 2.396	2.4 <sub>0</sub>	〃 小気泡
29F	〃	D.10.3	115.1 115.1	66.9 66.9	2.387 2.387	2.3 <sub>9</sub>	〃 気泡 白濁 脈理
29G	〃	D.10.2	98.3 98.3	57.0 57.0	2.380 2.380	2.3 <sub>6</sub>	〃
29H	〃	D.10.3	116.8 116.9	68.0 68.0	2.393 2.390	2.3 <sub>9</sub>	〃 気泡
29I	〃	D.10.2	114.2 114.2	66.4 66.4	2.389 2.389	2.3 <sub>9</sub>	〃 気泡
32	星・旭光/アーチ付霰文皿	D.13.5	189.7 189.8	111.0 111.0	2.410 2.408	2.4 <sub>1</sub>	NT 2 小気泡
33A	劍菊/霰文小皿	D.10.1	102.3 102.2	60.7 60.6	2.459 2.456	2.4 <sub>6</sub>	T・N 38 気泡
33B	〃	D.10.1	102.6 102.7	60.5 60.6	2.437 2.439	2.4 <sub>4</sub>	〃
33C	〃	D.10.2	109.0 109.0	64.8 64.9	2.466 2.471	2.4 <sub>7</sub>	〃 バリ
33D	〃	D.10.1	108.1 108.2	63.8 63.9	2.440 2.442	2.4 <sub>4</sub>	〃
33E	〃	D.10.2	95.2 95.2	56.5 56.4	2.459 2.453	2.4 <sub>6</sub>	〃 バリ
33F	〃	D.10.1	107.6 107.7	63.6 63.7	2.445 2.447	2.4 <sub>5</sub> *	〃 気泡 炉材(?)の片
33G	〃	D.10.1	109.0 109.0	64.9 64.8	2.471 2.466	2.4 <sub>7</sub>	〃 小欠 巻込み
33H	〃	D.10.2	116.4 116.4	69.2 69.2	2.466 2.466	2.4 <sub>7</sub>	〃 小欠 霰文凸起に孔 バリ

資料番号	資料名	寸法	空气中重量 $W_1$	水中重量 $W_2$	$\frac{W_1}{W_1 - W_2}$	比重	備考
No.1993.34	籠目/籠目文楕円皿	D.14.8 <sup>cm</sup>	247.7 <sup>g</sup> 247.7	146.5 <sup>g</sup> 146.5	2.447 2.447	2.4 <sub>5</sub> *	N・T 29 9は鏡文字 巻込み
36	剣菊/四つ目市松八つ割文皿	D.15.1	275.9 276.0	166.5 166.4	2.521 2.518	2.5 <sub>2</sub>	T・N 15 小欠
40A	羅針/A GOOD NAME ... 文皿	D.13.9	140.8 140.8	84.5 84.6	2.500 2.505	2.5 <sub>0</sub>	No 2971(意匠登録) 陽刻：外側 小気泡
40B	"	D.14.1	149.0 148.9	89.5 89.4	2.504 2.502	2.5 <sub>0</sub>	" 気泡 バリ
40C	"	D.13.9	138.2 138.2	83.0 83.0	2.503 2.503	2.5 <sub>0</sub>	" 小気泡
42	星・旭光/ア一十付叢文皿	D.13.5	185.4 185.4	108.1 108.1	2.398 2.398	2.4 <sub>0</sub>	NT 2 小欠 気泡
井上 1	ねじ菊/四つ目市松八つ割文小皿	D.12.2	150.2 150.2	87.0 87.0	2.376 2.376	2.3 <sub>9</sub>	NT 11
井上 2	菊/ア一十付叢文皿	D.16.6	334.9 334.8	202.1 202.1	2.521 2.522	2.5 <sub>2</sub>	NT 14 気泡
井上 3	剣菊/籠文楕円皿	D.15.9	219.5 219.6	128.9 129.0	2.422 2.423	2.4 <sub>2</sub>	T・N 31
井上 4	剣菊/四つ目市松文皿	D.15.9	246.6 246.6	143.4 143.5	2.389 2.391	2.3 <sub>9</sub>	T・N No75

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写真65 N·T 8 No.1981.226A

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真61 T.N No3 No.1977.76A

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真66 T·N No8 No.1979.48

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真62 NT 4 No.1974.57A

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真71 NT 14 井上 2

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真67 N・T 9\* No.1984.327A

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真72 N・T 15 No.1992.56

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真68 NT 11 井上 1

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真73 T・N 15 No.1983.74

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真69 NT 12 No.1991.33

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真74 TN 17 No.1980.6

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真70 N・T 13 No.1990.26①-②

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真79 T N No25 No1984.120

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真75 T N 18 No1984.63

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真80 N T 27 No.1985.22

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真76 N T 20 No.1989.17①-②

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真81 N T 29\* No.1984.176

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真77 T N 23 No.1990.5A

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真82 T · N 31 井上 3

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真78 N T 25 No.1989.18A



Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真87 N・T 39 No.1990.72A

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真83 T・N No31 No.1991.30A

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真88 T・N No39 No.1989.101

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真84 T N 35 No.1984.69

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真89 T・N 40 No.1984.291

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真85 T N 37 No.1984.139

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真90 T N 42 No.1981.105

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写真86 T・N 38 No.1990.69A

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真95 T N 55 No.1985.31

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真91 T N 46 No.1985.29①-②

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真96 T N 56 No.1984.331

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真92 T N 48 No.1982.84

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真97 T·N No63 No.1991.43A

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真93 T·N No51 No.1992.19A

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真98 T·N No63 No.1984.268

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真94 T N 52 No.1984.269

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真103 野々村藤助のラベル No.1974.37A

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真99 T.N No.63 No.1984.258

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真104 三好鹿蔵のラベル No.1992.48A

Rights were not granted to include this image in electronic media. Please refer to the printed journal.


写真100 T.N No.75 井上 4

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真105 三好鹿蔵のラベル No.1983.135A

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真101 T.N No.76 No.1970.25A



Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真106 三好鹿蔵のラベル No.1990.12A

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真102 T.N No.1984.177

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真111 意匠登録 2971 No.1981.118

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真107 三好鹿蔵のラベル No.1989.44

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真112 意匠登録 2971 No.1981.270

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真108 MIYOSHI No.1970.14A

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真113 意匠登録 25948 No.1983.122

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真109 MIYOSHI No.1984.209

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真114 意匠登録 27811 No.1980.24

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真110 意匠登録 2971 No.1976.145

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真119 N・T 29\* No.1993.34

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真115 N・T 29\* No.1993.34

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真120 T,N No63 No.1993.9A

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真116 T,N No63 No.1993.9A

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写真121 意匠登録 2971 No.1992.28

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写真122 意匠登録 2971 No.1993.28A

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

写真117 意匠登録 2971 No.1992.28

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写真118 意匠登録 2971 No.1993.28A

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No.1979.48

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No.1974.57A (- C)

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No.1970.11

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No.1980.6

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No.1976.5

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No.1970.14A (- C)

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No.1980.24

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No.1976.145

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No.1970.25A (- J)

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No.1980.131

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No.1977.76A (- B)

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No.1974.37A (- E)

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No.1982.186

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No.1981.320

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No.1981.105

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No.1983.74

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No.1982.16

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No.1981.118

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No.1983.122

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No.1982.84

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No.1981.226 A (- E)

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No.1983.135 A (- F)

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No.1982.104

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No.1981.270

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No.1984.209

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No.1984.212

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No.1984.144

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No.1984.63

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No.1984.258

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No.1984.176

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No.1984.69

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

No.1984.261 A (- B)

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No.1984.177

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No.1984.120



Rights were not granted to include this image in electronic media. Please refer to the printed journal.

No.1985.26

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No.1984.327A (- B)

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No.1984.268

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No.1985.29①

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No.1984.331

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No.1984.269

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No.1985.29②

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No.1984.349A (- E)

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No.1984.291

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No.1985.31

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No.1985.22

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No.1984.298A (- B)

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No.1989.98A (- E)

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No.1989.18A (- E)

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No.1985.75

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No.1989.101

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No.1989.19A (- H)

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No.1986.36

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No.1990.3

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No.1989.28

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No.1989.17①

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

No.1990.5A (- E)

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

No.1989.44

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No.1989.17②

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

No.1990.66A (- E)

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

No.1990.38

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No.1990.12A (- D)

Rights were not granted to include this image in electronic media. Please refer to the printed

No.1990.69A (- I)

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No.1990.51

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No.1990.26①

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No.1990.72A (- B)

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No.1990.56

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No.1990.26②

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No.1991.1

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No.1990.59

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No.1990.27A (- I)

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No.1992.2A (- B)

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No.1991.30A (- D)

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No.1991.13A (- K)

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No.1992.4A (- C)

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No.1991.31

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No.1991.14

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No.1992.7

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No.1991.33

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No.1991.15

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No.1992.8

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No.1991.43A (- E)

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No.1991.28A (- E)

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

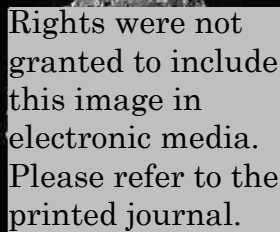
No.1992.32①

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

No.1992.23

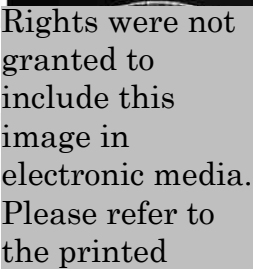
Rights were not granted to include this image in electronic media. Please refer to the printed journal.

No.1992.9A(-B)



Rights were not granted to include this image in electronic media. Please refer to the printed journal.

No.1992.32②

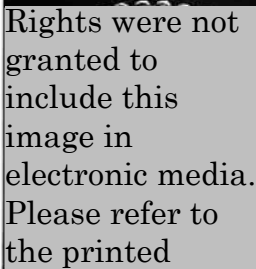


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No.1992.26

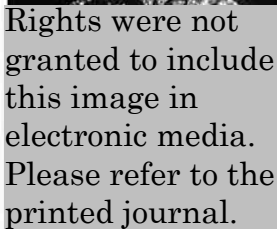
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No.1992.18A(-F)



Rights were not granted to include this image in electronic media. Please refer to the printed

No.1992.40

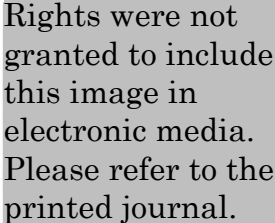


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No.1992.28

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No.1992.19A(-E)



Rights were not granted to include this image in electronic media. Please refer to the printed journal.

No.1992.48A(-F)



Rights were not granted to include this image in electronic media. Please refer to the printed

No.1992.29

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No.1992.20

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

No.1993.17A (-H)

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

No.1993.9A (-D)

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No.1992.50

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No.1993.25

Rights were not granted to include this image in electronic media. Please refer to the printed

No.1993.10A (-H)

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

No.1992.52A (-B)

Rights were not granted to include this image in electronic media. Please refer to the printed journal

No.1993.28A (-B)

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

No.1993.11A (-C)

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

No.1992.55A (-F)

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No.1993.29A (-I)

Rights were not granted to include this image in electronic media. Please refer to the printed

No.1993.12A (-D)

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

No.1992.56

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

井上 3

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

No.1993.40A(-C)

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

No.1993.32

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

井上 4

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

No.1993.42

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

No.1993.33A(-H)

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

No.1992.7 箱底面

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

井上 1

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

No.1993.34

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

井上 2

Rights were not granted to include this image in electronic media. Please refer to the printed journal.

No.1993.36