

# 性質・性能 SPインキ耐候性色の促進耐候性試験結果

## 1. 印刷条件

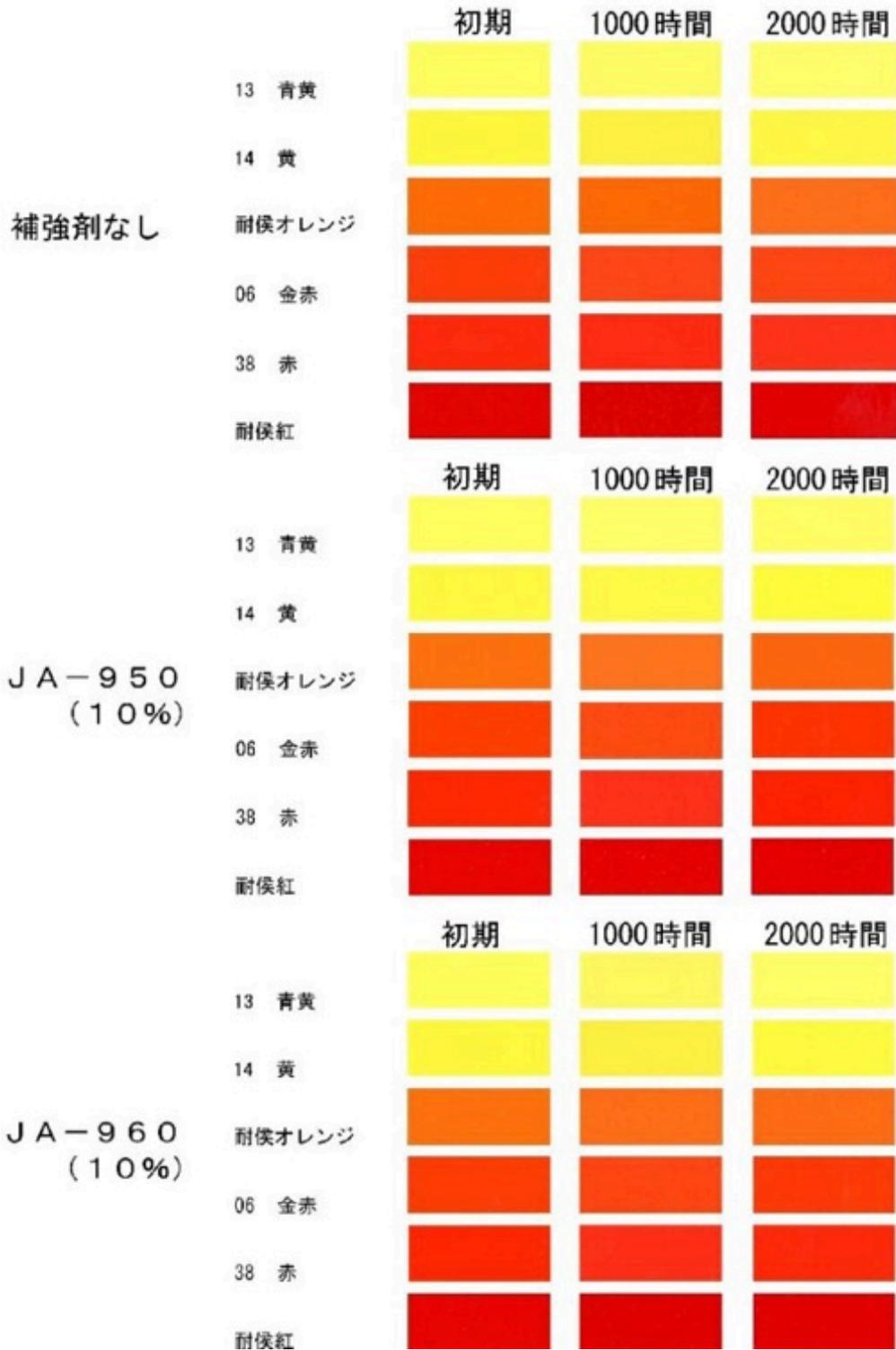
印刷素材	塩ビステッカー（リンテック性FP#5011）
試験インキ	713青黄
	714黄
	特製オレンジ
	706金赤
	738赤
	特製紅
添加剤	硬化剤なし
	硬化剤JA-950（10%）
	硬化剤JA-960（10%）
刷版	ポリエステル250メッシュ
乾燥条件	常温7日間

## 2. 試験条件

試験機 サンシャインウェザーメーター WEL-SUN-HCH型 (スガ試験機(株)製)	ブラックパネル温度	黒色試料表面温度63°C
	試験機槽内温度	約60%
	降水条件	60分毎に12分の降水
	照射面	印刷面に照射
	照射時間	200時間毎に2000時間まで
測定機 分光光度計 COLOR EYE-7000 (マクベス社製)	光源	D-65 キセノンフラッシュランプ
測定機 デジタル変角光沢計VGV-5D (スガ試験機(株)製)	光源	ハロゲンランプ
	入射角および受光角	60°

### 3. 結果

#### SPインキ耐候性試験





## SPインキ耐候性(補強剤無し)

SP713 青黄(補強剤無し)

	L*	a*	b*	DL*	Da*	Db*	DE*	光沢度
Standard	91.651	-7.817	88.488					92
200h r	90.187	-6.228	86.137	-1.463	1.589	-2.351	3.192	89
400h r	89.515	-5.511	85.544	-2.136	2.306	-2.944	4.306	92
600h r	89.204	-4.937	84.493	-2.447	2.881	-3.994	5.499	94
800h r	89.458	-5.646	83.207	-2.193	2.171	-5.28	6.116	94
1000h r	89.431	-5.799	82.362	-2.22	2.018	-6.126	6.821	86
1200h r	89.4	-5.936	80.734	-2.251	1.881	-7.754	8.29	77
1400h r	88.645	-4.711	80.378	-3.006	3.106	-8.11	9.19	82
1600h r	89.821	-7.036	80.456	-1.83	0.782	-8.032	8.274	58
1800h r	88.585	-5.361	78.893	-3.066	2.456	-9.595	10.368	60
2000h r	87.783	-4.807	78.391	-3.868	3.01	-10.097	11.224	41

SP714 黄(補強剤無し)

	L*	a*	b*	DL*	Da*	Db*	DE*	光沢度
Standard	86.205	9.365	87.758					83
200h r	85.453	9.48	86.531	-0.752	0.115	-1.227	1.443	85
400h r	85.217	9.189	85.766	-0.988	-0.176	-1.992	2.231	87
600h r	85.057	9.397	85.069	-1.148	0.032	-2.689	2.924	90
800h r	84.681	9.939	84.268	-1.524	0.574	-3.49	3.851	90
1000h r	85.055	8.88	84.068	-1.15	-0.485	-3.69	3.896	82
1200h r	84.888	9.082	83.719	-1.317	-0.283	-4.04	4.258	75
1400h r	84.463	9.278	82.869	-1.742	-0.087	-4.89	5.191	79
1600h r	85.017	8.396	85.539	-1.188	-0.969	-2.219	2.697	50
1800h r	84.136	9.771	84.797	-2.069	0.406	-2.961	3.635	49
2000h r	83.659	9.784	84.71	-2.546	0.419	-3.048	3.994	39

SP 特製オレンジ(補強剤無し)

	L*	a*	b*	DL*	Da*	Db*	DE*	光沢度
Standard	59.951	54.563	52.823					73
200h r	59.68	54.2	53.131	-0.271	-0.363	0.308	0.548	73
400h r	59.692	54.049	53.227	-0.259	-0.514	0.404	0.704	73
600h r	59.713	53.799	53.174	-0.238	-0.764	0.351	0.874	72
800h r	59.461	53.756	53.518	-0.49	-0.807	0.696	1.173	78
1000h r	59.47	53.652	53.639	-0.481	-0.912	0.816	1.315	73
1200h r	59.439	53.427	53.561	-0.512	-1.136	0.738	1.448	66
1400h r	59.418	53.35	53.178	-0.533	-1.213	0.355	1.372	59
1600h r	59.485	53.135	54.261	-0.466	-1.428	1.438	2.08	56
1800h r	58.906	53.075	53.673	-1.045	-1.488	0.85	2.007	48
2000h r	58.468	52.3	53.206	-1.483	-2.264	0.383	2.733	38

SP706 金赤(補強剤無し)

	L*	a*	b*	DL*	Da*	Db*	DE*	光沢度
Standard	48.62	55.369	37.353					80
200h r	48.477	55.391	37.748	-0.143	0.023	0.395	0.421	76
400h r	48.619	55.52	38.728	-0.002	0.152	1.375	1.383	77
600h r	48.343	55.223	38.794	-0.277	-0.145	1.442	1.475	78
800h r	47.948	54.588	40.878	-0.673	-0.78	3.525	3.673	80
1000h r	48.56	55.027	45.155	-0.061	-0.341	7.802	7.81	50
1200h r	48.42	54.612	46.445	-0.201	-0.756	9.093	9.126	40
1400h r	47.697	54.82	45.274	-0.923	-0.548	7.922	7.994	37
1600h r	48.232	55.797	48.229	-0.389	0.428	10.876	10.891	19
1800h r	47.193	55.272	46.073	-1.427	-0.096	8.721	8.837	14
2000h r	46.463	54.876	44.402	-2.158	-0.492	7.05	7.389	13

SP738 赤(補強剤無し)

	L*	a*	b*	DL*	Da*	Db*	DE*	光沢度
Standard	46.898	59.629	34.372					66
200h r	47.009	59.678	35.195	0.111	0.049	0.822	0.831	68
400h r	46.934	59.858	35.628	0.036	0.229	1.256	1.277	66
600h r	47.025	59.816	35.597	0.127	0.188	1.224	1.245	64
800h r	46.858	60.217	36.749	-0.04	0.588	2.377	2.449	70
1000h r	46.839	60.386	37.538	-0.059	0.757	3.166	3.256	61
1200h r	46.716	60.367	37.994	-0.182	0.739	3.621	3.7	55
1400h r	46.434	60.051	37.873	-0.464	0.422	3.501	3.557	43
1600h r	46.157	61.122	41.399	-0.741	1.493	7.026	7.222	28
1800h r	45.427	61.118	42.749	-1.471	1.49	8.377	8.634	16
2000h r	44.775	60.204	41.561	-2.123	0.576	7.189	7.518	16

SP700 特製紅(補強剤無し)

	L*	a*	b*	DL*	Da*	Db*	DE*	光沢度
Standard	39.191	46.722	23.734					107
200h r	39.765	46.386	24.071	0.574	-0.337	0.337	0.746	106
400h r	39.772	46.017	24.145	0.582	-0.705	0.411	1.002	102
600h r	39.793	46.132	24.268	0.603	-0.59	0.534	0.998	102
800h r	40.459	43.839	24.17	1.268	-2.883	0.435	3.179	110
1000h r	40.963	42.935	24.73	1.772	-3.787	0.996	4.299	108
1200h r	40.84	43.799	24.876	1.65	-2.923	1.142	3.546	105
1400h r	41.028	42.991	25.011	1.838	-3.731	1.277	4.351	104
1600h r	41.902	41.185	26.286	2.711	-5.537	2.552	6.672	114
1800h r	41.055	42.581	27.364	1.865	-4.142	3.63	5.814	96
2000h r	41.387	42.288	25.866	2.197	-4.434	2.132	5.388	106





SPインキ耐候性(JA-950)

SP713青黄+補強剤JA-950(10%)

	L*	a*	b*	DL*	Da*	Db*	DE*	光沢度
Standard	91.64	-7.987	88.313					90
200h r	90.335	-6.587	86.194	-1.305	1.4	-2.119	2.855	90
400h r	89.628	-5.796	84.449	-2.012	2.191	-3.864	4.876	81
600h r	89.258	-5.126	81.536	-2.381	2.861	-6.777	7.732	80
800h r	89.472	-5.676	82.501	-2.168	2.311	-5.812	6.62	84
1000h r	89.646	-6.19	81.815	-1.994	1.796	-6.498	7.03	60
1200h r	89.348	-5.963	79.761	-2.292	2.023	-8.552	9.082	45
1400h r	88.675	-5.269	78.113	-2.965	2.718	-10.2	10.965	45
1600h r	89.267	-6.495	80.344	-2.372	1.491	-7.969	8.447	29
1800h r	88.107	-5.744	77.318	-3.533	2.242	-10.995	11.764	33
2000h r	86.226	-4.421	74.577	-5.414	3.566	-13.736	15.189	32

SP714黄+補強剤JA-950(10%)

	L*	a*	b*	DL*	Da*	Db*	DE*	光沢度
Standard	86.564	8.182	87.319					82
200h r	85.929	7.88	86.452	-0.635	-0.301	-0.868	1.117	85
400h r	85.328	8.769	85.846	-1.237	0.588	-1.473	2.011	81
600h r	85.294	8.526	84.115	-1.27	0.344	-3.204	3.464	84
800h r	85.061	8.624	84.01	-1.503	0.443	-3.309	3.661	76
1000h r	85.168	8.057	83.537	-1.396	-0.124	-3.782	4.033	47
1200h r	85.415	7.242	83.312	-1.149	-0.939	-4.008	4.273	49
1400h r	84.813	7.935	82.398	-1.751	-0.247	-4.922	5.23	46
1600h r	84.868	7.49	81.841	-1.696	-0.691	-5.479	5.777	23
1800h r	84.312	7.904	83.23	-2.252	-0.277	-4.09	4.677	23
2000h r	82.668	8.431	80.309	-3.896	0.25	-7.01	8.024	22

SP700特製オレンジ+補強剤JA-950(10%)

	L*	a*	b*	DL*	Da*	Db*	DE*	光沢度
Standard	61.059	53.097	52.62					66
200h r	60.72	52.858	52.3	-0.339	-0.239	-0.32	0.524	55
400h r	59.978	53.633	53.095	-1.082	0.536	0.475	1.297	45
600h r	59.842	53.631	52.754	-1.217	0.534	0.135	1.336	52
800h r	60.667	52.415	53.259	-0.393	-0.682	0.639	1.014	61
1000h r	60.625	52.27	53.682	-0.434	-0.827	1.063	1.415	49
1200h r	59.636	53.086	53.681	-1.423	-0.01	1.062	1.776	38
1400h r	59.293	52.667	53.334	-1.766	-0.429	0.715	1.953	28
1600h r	59.284	52.684	54.373	-1.776	-0.413	1.753	2.529	25
1800h r	58.732	52.526	54.28	-2.328	-0.571	1.661	2.916	17
2000h r	57.49	51.32	53.296	-3.57	-1.777	0.676	4.045	12

SP706金赤+補強剤JA-950(10%)

	L*	a*	b*	DL*	Da*	Db*	DE*	光沢度
Standard	48.979	56.113	38.168					80
200h r	49.024	55.962	38.585	0.044	-0.151	0.417	0.445	80
400h r	48.947	55.943	40.06	-0.033	-0.17	1.892	1.9	82
600h r	48.761	55.55	40.1	-0.218	-0.562	1.932	2.024	85
800h r	48.651	55.628	43.812	-0.328	-0.485	5.644	5.674	59
1000h r	48.659	54.989	48.353	-0.321	-1.124	10.184	10.251	35
1200h r	48.462	55.076	48.534	-0.518	-1.037	10.365	10.43	32
1400h r	47.667	54.846	47.036	-1.312	-1.267	8.868	9.053	30
1600h r	48.269	56.53	49.044	-0.711	0.417	10.876	10.907	21
1800h r	47.128	55.915	46.818	-1.852	-0.197	8.65	8.848	15
2000h r	45.788	54.683	43.724	-3.191	-1.43	5.555	6.564	13

SP738赤+補強剤JA-950(10%)

	L*	a*	b*	DL*	Da*	Db*	DE*	光沢度
Standard	47.098	59.928	34.893					73
200h r	47.183	60.144	35.476	0.085	0.217	0.582	0.627	68
400h r	46.763	61.051	37.607	-0.335	1.123	2.713	2.956	70
600h r	46.883	60.519	36.974	-0.215	0.592	2.081	2.174	70
800h r	47.137	60.787	37.445	0.039	0.86	2.552	2.693	62
1000h r	47.013	61.072	39.516	-0.085	1.144	4.623	4.763	45
1200h r	46.86	60.691	39.744	-0.237	0.764	4.851	4.916	37
1400h r	46.422	60.124	40.049	-0.676	0.197	5.156	5.204	31
1600h r	46.156	60.9	43.513	-0.942	0.972	8.62	8.726	13
1800h r	45.45	59.98	42.36	-1.647	0.053	7.467	7.646	13
2000h r	44.562	58.652	41.628	-2.535	-1.275	6.735	7.308	9

SP特製紅+補強剤JA-950(10%)

	L*	a*	b*	DL*	Da*	Db*	DE*	光沢度
Standard	48.947	48.157	24.466					107
200h r	49.03	47.218	24.383	0.398	-0.938	-0.083	1.023	106
400h r	48.927	46.807	24.754	0.584	-1.35	0.288	1.499	106
600h r	48.653	46.013	24.605	0.751	-2.143	0.139	2.275	107
800h r	48.968	44.295	25.051	1.457	-3.861	0.585	4.168	112
1000h r	48.995	43.237	25.591	1.933	-4.92	1.125	5.404	107
1200h r	48.486	43.597	26.15	1.874	-4.559	1.684	5.209	101
1400h r	48.247	43.152	26.328	1.626	-5.004	1.862	5.582	102
1600h r	48.232	43.847	28.029	1.136	-4.31	3.563	5.707	64
1800h r	47.478	42.828	26.761	1.449	-5.329	2.295	5.981	66
2000h r	47.069	44.864	26.946	-0.182	-3.293	2.48	4.126	46





## SPインキ耐候性(JA-960)

SP713 青黄+補強剤JA-960(10%)

	L*	a*	b*	DL*	Da*	Db*	DE*	光沢度
Standard	91.658	-8.045	88.601					91
200h r	89.752	-5.621	84.823	-1.905	2.425	-3.778	4.877	85
400h r	89.008	-4.607	83.7	-2.649	3.438	-4.902	6.548	84
600h r	88.62	-4.32	82.783	-3.037	3.725	-5.818	7.547	87
800h r	88.548	-4.251	82.173	-3.11	3.794	-6.429	8.087	85
1000h r	88.672	-4.884	81.172	-2.986	3.162	-7.43	8.609	89
1200h r	88.658	-5.129	80.731	-2.999	2.917	-7.871	8.914	86
1400h r	88.333	-4.282	80.167	-3.324	3.763	-8.435	9.816	87
1600h r	89.313	-6.462	80.699	-2.344	1.583	-7.903	8.394	38
1800h r	88.319	-5.105	78.618	-3.339	2.94	-9.983	10.929	43
2000h r	88.513	-5.654	78.355	-3.144	2.391	-10.246	10.981	33

SP714 黄+補強剤JA-960(10%)

	L*	a*	b*	DL*	Da*	Db*	DE*	光沢度
Standard	86.644	7.931	87.498					87
200h r	85.542	8.641	85.45	-1.101	0.71	-2.048	2.431	82
400h r	85.038	8.794	84.204	-1.606	0.863	-3.294	3.765	82
600h r	84.881	8.796	83.747	-1.763	0.865	-3.751	4.234	82
800h r	84.787	8.709	83.046	-1.856	0.778	-4.452	4.886	83
1000h r	84.963	8.305	82.562	-1.681	0.374	-4.936	5.228	70
1200h r	84.852	7.964	82.793	-1.792	0.033	-4.705	5.034	63
1400h r	84.72	8.095	81.791	-1.923	0.164	-5.707	6.025	66
1600h r	85.403	7.025	83.572	-1.24	-0.906	-3.926	4.216	35
1800h r	84.56	8.065	82.857	-2.084	0.134	-4.641	5.089	34
2000h r	84.477	7.708	82.977	-2.166	-0.223	-4.521	5.018	24

SP特製オレンジ+補強剤JA-960(10%)

	L*	a*	b*	DL*	Da*	Db*	DE*	光沢度
Standard	60.838	53.6	53.086					70
200h r	60.553	53.107	52.523	-0.286	-0.493	-0.562	0.8	45
400h r	60.145	53.314	52.754	-0.694	-0.285	-0.331	0.82	43
600h r	59.927	53.284	52.728	-0.911	-0.315	-0.358	1.029	44
800h r	59.873	53.325	53.643	-0.966	-0.275	0.558	1.149	54
1000h r	60.084	52.862	54.222	-0.755	-0.737	1.136	1.55	52
1200h r	59.674	52.909	54.009	-1.165	-0.69	0.923	1.639	45
1400h r	59.847	52.459	54.324	-0.992	-1.141	1.238	1.954	36
1600h r	59.902	52.543	55.052	-0.936	-1.056	1.966	2.42	30
1800h r	59.518	52.256	55.15	-1.321	-1.343	2.064	2.794	28
2000h r	59.249	52.204	55.832	-1.589	-1.395	2.746	3.466	18

SP706 金赤+補強剤JA-960(10%)

	L*	a*	b*	DL*	Da*	Db*	DE*	光沢度
Standard	48.947	55.937	37.707					84
200h r	49.03	55.405	38.421	0.083	-0.531	0.714	0.894	73
400h r	48.927	55.174	39.606	-0.02	-0.763	1.9	2.047	74
600h r	48.653	55.134	40.134	-0.294	-0.803	2.427	2.573	73
800h r	48.968	54.367	44.408	0.021	-1.569	6.701	6.882	67
1000h r	48.995	54.144	46.995	0.048	-1.792	9.288	9.46	42
1200h r	48.486	55.13	48.001	-0.461	-0.807	10.294	10.336	32
1400h r	48.247	55.261	47.265	-0.7	-0.676	9.558	9.608	28
1600h r	48.232	57.342	48.884	-0.715	1.406	11.177	11.288	19
1800h r	47.478	56.533	46.461	-1.469	0.597	8.754	8.897	14
2000h r	47.069	56.378	45.533	-1.878	0.442	7.826	8.06	13

SP738 赤+補強剤JA-960(10%)

	L*	a*	b*	DL*	Da*	Db*	DE*	光沢度
Standard	46.889	59.64	34.45					76
200h r	47.161	59.463	34.815	0.272	-0.177	0.366	0.489	57
400h r	46.991	59.723	35.869	0.102	0.083	1.419	1.425	54
600h r	47.021	59.897	36.094	0.132	0.257	1.644	1.669	52
800h r	46.911	60.31	37.442	0.022	0.67	2.992	3.067	55
1000h r	46.724	60.939	40.085	-0.164	1.3	5.636	5.786	35
1200h r	46.685	60.674	41.625	-0.203	1.034	7.175	7.252	23
1400h r	46.448	60.72	42.409	-0.44	1.08	7.96	8.045	18
1600h r	46.048	61.341	43.543	-0.841	1.702	9.094	9.29	8
1800h r	45.665	61.025	43.443	-1.224	1.385	8.994	9.182	7
2000h r	45.238	60.901	43.446	-1.651	1.261	8.997	9.233	6

SP特製紅+補強剤JA-960(10%)

	L*	a*	b*	DL*	Da*	Db*	DE*	光沢度
Standard	39.467	47.983	24.062					108
200h r	40.362	46.393	24.342	0.895	-1.59	0.28	1.846	109
400h r	40.463	45.078	23.971	0.995	-2.905	-0.091	3.072	106
600h r	40.556	44.994	24.269	1.089	-2.989	0.207	3.188	105
800h r	41.333	43.632	25.044	1.866	-4.352	0.982	4.836	112
1000h r	41.878	42.79	25.754	2.411	-5.194	1.692	5.971	109
1200h r	41.657	43.222	26.688	2.189	-4.761	2.626	5.862	91
1400h r	41.73	43.216	26.209	2.263	-4.768	2.147	5.698	93
1600h r	41.043	42.997	27.277	1.576	-4.987	3.215	6.139	67
1800h r	40.271	44.313	27.966	0.804	-3.671	3.904	5.419	51
2000h r	41.181	42.646	26.885	1.714	-5.337	2.823	6.276	65

