

We offer customers high-spec Coating Machines, Dipping Machines and Desktop-type Coating Machines.
For detailed information, please contact us.

ALPHA DESIGN CO.,LTD. ACM300L

- Advantage
- Masking Free
- 3D Programming
- 3D PCB Sensor
- Production Line Proposal



Musashi Engineering Co., Ltd.

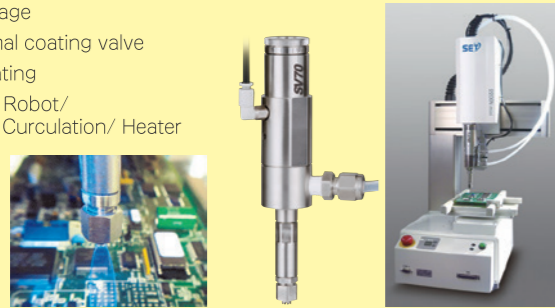
Non-contact jet dispenser *AeroJet*

- Advantage
- Masking Free
- Low Price
- High Accuracy
- Pressure Feed System
- Desktop-type



SAN-EI TECH CO.,LTD. *SV70*

- Advantage
- Conformal coating valve
- Film Coating
- (Option) Robot/
Material Circulation/ Heater



Asahisouken Co.,Ltd. Dipping Machine

- Advantage
- Automatic Viscosity Control
- Automatic material temperature control
- High temperature and High Viscosity application
- Over flow circulation
- Drying Process
- Custom-made proposal



PRODUCT SELECTION GUIDE

Conformal Coatings Tailored to Specific PCB Applications

HumiSeal®

AR BROWN

Think Quality & Create Value

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Distributor

Sep 2017

Notice

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Electronics



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Electronics



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Electronics



White Goods
Electronics

HumiSeal® is a Conformal Coatings for protecting electronic circuits from harsh environments that may contain moisture and dust.

HumiSeal® is widely used for Automotive, Home Appliances, Aircraft, and Aerospace Industries.

We offer Low VOC grade for environmental management. We provide the same quality in North America, Europe, and Asia.

HumiSeal®

Type	Solvent Type									Low VOC Type		
	1B58LU-60 NEW	1B51NS	1B51NSLU	1B51NSLU-55	1B66NS	1B66NSLU	1B73	1A27NS	1A27NSLU	UV50LV NEW *1	UV500 NEW *1	
Resin	Polyolefin	Polyolefin	Polyolefin	Polyolefin	Acrylic	Acrylic	Acrylic	Polyurethane	Polyurethane	Acrylic Polyurethane	Acrylic Polyurethane	
Liquid Properties	Solids Content(%)	14.5	21	21	14	35	35	30	50	50	95	95
	Viscosity(mPa·s)23°C	60	230	230	51	230	230	250	750	750	80~120	275~375
	Density(g/ml)23°C	0.79	0.8	0.8	0.8	0.91	0.91	0.93	0.98	0.98	1.0	1.0
	Color	Transparent Yellow	Transparent Yellow	Transparent Yellow	Transparent Yellow	Transparent Colorless	Transparent Colorless	Transparent Colorless	Transparent Yellow	Transparent Yellow	Transparent Yellow	Transparent Yellow
	Drying Time to Handle	10 minutes	10 minutes	10 minutes	10 minutes	10 minutes	10 minutes	10 minutes	15 minutes	15 minutes	—	—
	Recommended Drying Conditions	24h/25°C (0.5h/60°C)	24h/25°C (0.5~1h/50°C)	24h/25°C (0.5~1h/50°C)	24h/25°C (0.5~1h/50°C)	24h/25°C (0.5~1h/50°C)	24h/25°C (0.5~1h/50°C)	24h/25°C (0.5~1h/50°C)	24h/25°C *2 (0.5~1h/50°C)	24h/25°C *2 (0.5~1h/50°C)	10-40W/cm ² *3 *4	10-40W/cm ² *3 *4
	Flashpoint(°C)	-4.3	-4.3	-4.3	-4.3	-4.3	-4.3	-1	23	23	—	—
Physical/Electric Properties	Continuous Operating Range(°C)	-40~+140	-40~+130	-40~+130	-40~+130	-40~+125	-40~+125	-40~+125	-40~+125	-40~+125	—	—
	Thermal Shock *5	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	—	—
	Tensile Strength (MPa)23°C *6	34	26	26	26	16	16	40	36	36	—	—
	Extension(%)23°C *6	503	452	452	452	156	156	15	5	5	—	—
	Young's Modulus (MPa)23°C *7	19	73	73	73	180	180	180	221	221	6.394	0.36
	Adhesion(Copper) *8	100/100	100/100	100/100	100/100	100/100	100/100	100/100	100/100	100/100	—	—
	Insulation Resistance(Ω) *9	2.0×10 ¹⁴	2.0×10 ¹⁴	2.0×10 ¹⁴	2.0×10 ¹⁴	8.0×10 ¹⁴	8.0×10 ¹⁴	5.5×10 ¹⁴	3.5×10 ¹⁴	3.5×10 ¹⁴	—	—
	Dielectric Breakdown Voltage	90 *10	78.6 *10	78.6 *10	78.6 *10	22.4 *10	22.4 *10	6.3 *11	7.5 *11	7.5 *11	—	—
	Dielectric Withstand Voltage(V) *5	>1500	>1500	>1500	>1500	>1500	>1500	>1500	>1500	>1500	—	—
	Dielectric Constant	2.0 *12	2.4 *12	2.4 *12	2.4 *12	2.5 *12	2.5 *12	2.6 *12	3.5 *12	3.5 *12	—	—
	Dielectric Loss Tangent	0.006 *12	0.01 *12	0.01 *12	0.01 *12	0.01 *12	0.01 *12	0.01 *12	0.02 *12	0.02 *12	—	—
	Moisture Permeability (g/m ² ·24h) *13	6.0	6.2	6.2	6.2	60	60	40	70	70	—	—
	Standard *14	UL94V-0	UL94V-0	UL94V-0	UL94V-0	—	—	UL94V-0 *15	UL94V-0 *15	UL94V-0 *15	—	—
Thinner	906/904	903/904	903/904	903/904	901	901	901	901	901	—	—	
Fluorescent Tracer	○	—	○	○	—	○	○	—	○	○	○	
Remarks					✓ Aerosol		✓ Aerosol Good performance for Sulfied Gas	✓ Aerosol	✓ Aerosol			

Remarks

- *1 **NEW** For detailed information, please contact us
- *2 Optional Curing Conditions to Reach Optimum Properties : 30days/25°C
- *3 For detail, Please contact us
- *4 Secondary moisture cure mechanism will fully cure unexposed areas of the coating within 7 days.
- *5 MIL-I-46058C *6 JIS K 5400 8.8-1999
- *7 JIS K 7127 7.5 *8 JIS K 5600-5-6
- *9 JIS Type-II Test Board
- *10 kV/mm (JIS C 2110 8.2)
- *11 kV/mil (ASTM D-149)
- *12 ASTM-D150-65T 25°C1MHz
- *13 JIS Z 0208 (100μ)
- *14 In detail, Please check UL website
- *15 UL746E standards products

Caution

- ① HumiSeal is Flammable liquid
- ② Ensure adequate ventilation in the working area
- ③ HumiSeal® contains solvent. Inhalation, long term skin contact, may cause intoxication.
- ④ Use personal protective equipment, i.e., suitable work clothing, goggles and protective gloves. If spraying, utilize protective facemask.
- ⑤ Store in dark place at room temperature.
- ⑥ Please read MSDS/SDS for more information.

Others

- RoHS-PRTR regulation countermeasure products (As of Sep 2017)
- For clean up and rework, please contact us.
- Products' specification may be changed without notice.
- The information contained here is not to be considered specification or performance data.
- Package designs and specifications may be changed without notice because of products' improvement.



1. Flammable liquid
2. Risk of solvent intoxication
3. Contain harmful substances.
4. Industrious use only