"CF-10" RESIN FLUX
For Cored Solder Wire

DESCRIPTION

"CF-10" Resin Flux is an activated rosin formula for use in flux-core solder wire. This product conforms to Type RA of federal specification QQ-S-571. This cored flux exhibits the so-called "instant action" wetting behaviour. The high mobility and fast spreading action of this flux result in fast production line soldering.

RESIDUE PROPERTIES AND REMOVAL

This flux residue is non-corrosive and non-conductive under normal conditions of use. When exposed to an elevated temperature and humidity environment (40 ± 2°C; 90-95% RH) for 96 hour, there is no evidence of corrosion caused by the flux residue.

This mild property of the residue permits leaving the flux on the assembly for many applications. When required, the flux residue can be removed with Asahi Flux Cleaner.

PHYSICAL PROPERTIES

Specific Gravity @ 24°C	1.08
Water Extract Resistivity	56,000 ohm-cm
Acid Number	161
Classification	Type RA per QQ-S-571
Copper Mirror Test	Pass
Spread Factor	90% and above
Chloride Content	0.7%

HEALTH AND SAFETY

Same as with other flux-cored solder wires, adequate ventilation should be employed to remove flux fumes from the work area. Wash hands thoroughly with soap and water before eating or smoking after handling solder wire.

VOLTAGE APPLIED MOISTURE RESISTANCE TEST TO JIS Z 3197-1986

CLAUSE 6.9.

TEST PARAMETERS :

TEST SAMPLES	:	COMB ELECTRODES
DRYING TEMP.	:	100°C
DRYING TIME	:	30 MINS
CONDITIONING TEMP.	:	40 ± 2°C
CONDITIONING HUMIDITY	:	90 TO 95% RH
CONDITIONING TIME	:	96 HOURS
APPLIED VOLTAGE	:	100V POSITIVE POLARITY TO TERMINALS 1,3,5 NEGATIVE POLARITY TO TERMINALS 2,3,4
MEASURING TEMP.	:	23°C
MEASURING HUMIDITY	:	60% RH
TEST VOLTAGE APPLIED	:	100V
FLUX	:	CF-10

RESULTS :

SPL NO.	INSULATION RESISTANCE ($X10^{12}$ OHMS) MEASUREMENT IN ACCORDANCE TO JIS-Z-3197-1986 CLAUSE 6.9									
	TEST POINTS 1 & 2		TEST POINTS 2 & 3		TEST POINTS 3 & 4		TEST POINTS 4 & 5		AVERAGE	
	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT
1.	0.28	0.20	0.50	0.18	0.28	0.20	0.30	0.20		
2.	1.00	0.20	0.50	0.18	0.20	0.14	0.30	0.20	0.42	0.20

BT: BEFORE TEMPERATURE AND HUMIDITY TEST
AT: AFTER TEMPERATURE AND HUMIDITY TEST.

VOLTAGE APPLIED MOISTURE RESISTANCE TEST TO JIS Z 3197-1986

CLAUSE 6.8.

TEST PARAMETERS :

TEST SAMPLES	:	COMB ELECTRODES
DRYING TEMP.	:	100°C
DRYING TIME	:	30 MINS
CONDITIONING TEMP.	:	40 ± 2°C
CONDITIONING HUMIDITY	:	90 TO 95% RH
CONDITIONING TIME	:	96 HOURS
MEASURING TEMP.	:	23°C
MEASURING HUMIDITY	:	60% RH
TEST VOLTAGE APPLIED	:	100V
FLUX	:	CF-10

RESULTS :

SPL NO.	INSULATION RESISTANCE ($X10^{12}$ OHMS) MEASUREMENT IN ACCORDANCE TO JIS-Z-3197-1986 CLAUSE 6.9									
	TEST POINTS 1 & 2		TEST POINTS 2 & 3		TEST POINTS 3 & 4		TEST POINTS 4 & 5		AVERAGE	
	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT
1.	0.05	3.11	8.7	1.51	3.56	1.78	1.78	1.22	3.52	2.0

BT: BEFORE TEMPERATURE AND HUMIDITY TEST
AT: AFTER TEMPERATURE AND HUMIDITY TEST.

SOLDERABILITY TESTING IN ACCORDANCE TO IEC PUBLICATIONS 68-2-54 : TEST Ta

TEST PARAMETERS :

SOLDER TEMPERATURE	:	235 ± 5°C
IMMERSION SPEED	:	5 MM/SEC
IMMERSION DEPTH	:	1 MM
IMMERSION TIME	:	5 SEC

FLUX : CF-10
SOLDER COMPOSITION : Sn60/Pb40 of QQ-S-571

RESULTS:

TEST NO	1	2	3	4	5	AVERAGE
MAX. NON WETTING FORCE (mN)	0.46	0.64	0.63	0.68	0.73	0.63
MAX. WETTING FORCE (mN)	-0.38	-0.39	-0.49	-0.47	-0.45	-0.43
FORCE CHANGE (mN)	0.84	1.03	1.12	1.15	1.18	1.02
TIME TO ZERO AXIS	1.05	1.15	1.03	1.03	1.05	1.06
TIME TO FORCE ACCEPT (S)	3.45	3.65	2.95	3.05	3.40	3.3
DEWET COEFFICIENT	1.00	1.00	1.00	0.98	1.00	1.00