



## SMT FLUX GEL

# TYPE "MOB39i"

**Solder Flux Gel MOB39** has been specially developed in the laboratories of MBO in relation to Solder Cream (Chemical and Alloys) for Surface Mount Technology (SMT) applications.

Solder Flux Gel MOB39 is primarily intended for micro-electronics circuits using BGA components pre-loaded with solder pads.

Solder Flux Gel MOB39 due to its viscosity is an ideal flux for other applications:

- (a) As an alternative to Solder Paste where there is already sufficient solder alloy on the surface.
- (b) For repair / rework where the component carries solder alloy on its connecting surface

Benefits achieved from using MOB39 with BGA components over the use of cream are:

### Usage:

- Good resolution to solder particles
- Avoids bridging of tracks
- Compatibility with existing circuits
- Very minimal residue

### Economy:

- Requires approximately one fifth of material and application time
- Costs less than Solder Cream

### Environmental Benefit:

- Improves contact with lead
- Waste does not contain lead

**Solder Gel MOB39** has a base of high purity rosin with the equivalent activation of RMA (Rosin Mildly Active) to clear oxidants from the surface of the circuit in preparation for good fusion. The completed soldered connection will be the same as produced with Solder Cream which had been applied by screen or stencil deposition.

**Solder Gel MOB39** is designed for "no-clean" technology. After fusion, the very low level of residue remaining may be left without risk of corrosion.

### Additional Information:

Our manufacturing processes have been subjected to FMECA analysis (equivalent of AMDEC in Europe).

### Physiochemical Characteristics:

Appearance	: Gelatinous
Colour	: Transparent Honey
Density	: 1.01
Chlorine rate	: < 0.05%
Non volatile Content:	70%
Viscosity	: 400 Pas
Flash Point	: 100°C



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### Reliability & J-STD Compliance:

MOB 39 solder meets J-STD requirements as a ROL0 flux type:

Test	J-STD-004
Copper mirror	Pass
Silver chromate	Pass
Fluoride Spot	Pass
Copper Corrosion	Pass
S.I.R. test	Pass

#### Ionic contamination:

Solution of test: 75/25 solution

(Isopropyl alcohol/ deionised water) Board IPC-B-24

Limit*	→ 2.15 (µg NaCl equivalent /cm <sup>2</sup> )
Result	→ < 1 (µg NaCl equivalent /cm <sup>2</sup> )

\*(IPC- J-STD-001C § 8.3.6 IPC-TM-650, 2.3.25C)

### BONO Test (SAGEM / SCHNEIDER)::

No corrosion after 15 days under 20V and 100Vdc 85°C/85%RH

### Application Notes:

Spread a thin film of MOB39 onto the circuit in the component placement area or onto the base of the component. A thickness of 30 – 40 microns is ideal.

- MOB39 remains active for a minimum of 8 hours.
- MOB39 can be left on the circuit 6 hours before placement of the component.
- Refusion should be performed within 6 hours of placement of the component.

Solder Gel MOB39 is very useful in the area of repair and rework to prepare the surfaces of circuits for the replacement of components. After de-soldering, apply MOB39 to the PCB, spread thinly, position the new component, reheat locally.

Avoid using excess MOB39.

After fusion the process leaves no visible or reactive residues, this eliminates the need for cleaning and the risk of corrosion.

### Health and Safety:

Use in a well-ventilated area away from any source of ignition.

Risk Classification R42/43

Safety Classification S3/7 and S24/25

### Packaging:

5 ml, 10ml manual syringes, 100gm, 150g Jars, other packaging on request.

### Storage / Usable life:

Ideal storage conditions - in original sealed containers at 6°C-10°C.

Alternatively store at normal room conditions in a dry place away from any source of heat.

Shelf life minimum 12 months.

Product quality maintained under ISO 9001 - 2000  
Health and Safety data / Certificates of Conformity available on request