Product data sheet

BALVER ZINN®

94-SEL

 Date
 2025.09.02

 Language
 English

 SDS
 950406





Summary

94-SEL is a REL0 classified, partially water based flux for selective soldering. It is based on synthetic resins and is suitable for high reliability applications.

| Flux code | 94-SEL | |
|----------------------|--------|---|
| PROCESS | | |
| No-Clean process | | 9 |
| Post-solder cleaning | | 7 |

| INDUSTRY APPLICATION | | |
|---------------------------------|---|--|
| Consumer electronics | 6 | |
| Standard industrial electronics | | |
| Hi-Rel electronics (automotive) | | |

| PROCESS CAPABILITY | | |
|--------------------------------|---|--|
| Dip Soldering | 8 | |
| Drag soldering | 9 | |
| Dropjet fluxing | 9 | |
| High Pre-heat compatible | 9 | |
| High soldering temp compatible | 9 | |
| Long contact time compatible | 8 | |
| Reduces spreading of flux | 8 | |
| Reduces solderballing | 9 | |
| Reduces bridging | 8 | |
| Improves TH filling | | |
| Brilliant joint appearance | | |
| Cosmetic Cleanliness | | |
| ICCT compatible | | |
| Conformal coating compatible | | |

| Legend | | |
|---|--------|--|
| Especially made for this purpose | 9 - 10 | |
| Generally qualified for this purpose | 7 - 8 | |
| Generally usable, but not the best choice | | |
| Generally not usable for this purpose | 3 - 4 | |
| Wrong choice | 1 - 2 | |

| CLASSIFICATION | | |
|-----------------------|---------|--|
| DIN EN 29454-1: 1994 | 1.2.3.A | |
| IPC-J-STD-004-A: 2004 | REL0 | |

| PROPERTIES | | | |
|----------------|--|----------------|----------------|
| Density | | @20°C [kg/dm³] | 0.848 |
| Acid number | | [mg KOH/g] | 13.9 |
| Solid content | | [% w/w] | 2.6 |
| Water content | | [% w/w] | 21 |
| VOC content | | [% w/w] | Remainder |
| Filmformer(s) | | | Resin |
| Color | | | Colorless |
| Odor | | | Mild alcoholic |
| Flashpoint COC | | [°C] | 16.5 |
| Thinners | | | 308-00 |

| TEST REPORTS | | | |
|---------------------------|---------------------|--------------------|------|
| Certificate of Compliance | | website | |
| Application Note | | english | |
| Copper Mirror | IPC-TM-650 2.3.32 | | Pass |
| Halides | IPC-TM-650 2.3.33 | [Silver Chromate] | Pass |
| Halide | IPC-TM-650 2.3.35.1 | [Fluoride by Spot] | Pass |
| Copper Corrosion | IPC-TM-650 2.6.15 | | N/A |
| SIR | IPC-TM-650 2.6.3.3 | | Pass |
| ECM | IPC-TM-650 2.6.14.1 | | Pass |

| PACKAGING AND STORAGE | | |
|----------------------------------|----------------|--------|
| Packaging bottle (HDPE) [liter] | (HDPE) [liter] | 1 |
| Packaging can (HDPE) [liter] | (HDPE) [liter] | 5 / 10 |
| Recommended shelf-life in Months | | |
| Storage temperature | 20-25 °C | 9 |

Check material compatibility with every process change!

Industrial chemical product.

Read MSDS before use.

Disclaimer

This information is intended as advice to the best of our knowledge. The provided data is based on our own measurements, they do not provide any guaranteed properties nor are these delivery specifications. Due to the versatility of materials, applications and taking in consideration the industrial property rights of third parties, Balver Zinn Josef Jost GmbH & Co. KG cannot take any liability.