



# Electronic

# BALVER ZINN®

## Technical Data Sheet

### BALVER ZINN SOLDERPASTE PF32G FMQ SN96C (SnAg3.8Cu0.7)

#### General information

**BALVER ZINN SOLDER PASTE PF32G FMQ SN96C** is a lead-free,\* no clean, solder paste for air or nitrogen reflow applications. The unique flux composition of **BALVER ZINN SOLDER PASTE PF32G FMQ SN96C** gives excellent print and reflow characteristics with lead-free alloys. Print speeds can be achieved up to 150mm/s with excellent characteristics down to 16-20 mils pitch. The post soldering residues of **BALVER ZINN SOLDER PASTE PF32G FMQ SN96C** are very low and concentrated around the pad. **BALVER ZINN SOLDER PASTE PF32G FMQ SN96C** is a no clean formulation. The residues can remain on the board after reflow and will not interfere with in-circuit test. The residues are not harmful. The paste flux system of **BALVER ZINN SOLDER PASTE PF32G FMQ SN96C** shows long tack life until 24 hours and long stencil life until 8 hours. The paste flux compositions allows reflow profiles with a peak temperature of 235°C - 250°C and enable a wide process window with lead free solders. **BALVER ZINN SOLDER PASTE PF32G FMQ SN96C** is also suitable for vapour phase soldering at temperatures over 230°C and is available as a licensed lead free alloy. SN96C-SnAg3,8Cu0,7 (JPN 3027441; US 5527628).

\***BALVER ZINN SOLDER PASTE PF32 FMQ SN96C** does not contain hazardous substances beyond the limits prescribed by EU Directive 2002/95/EG ("RoHS").

Technical information and further Technical Data Sheets can be found on our website ([www.BALVERZINN.com](http://www.BALVERZINN.com)). You can also obtain all information and documents directly from **BALVER ZINN**.

#### BALVER ZINN Production Programme

The **BALVER ZINN** production programme also includes solder pastes, flux and solder wires. Beside the **SN100C** product family, **BALVER ZINN** offers additional unpatented and patented solder alloys for wave soldering, reflow and rework.

#### Product Properties

- Flux classified according to J-STD-004 as: **ROLO**
- Paste classified according to EN 61190 -1-2: **ROLO**
- Alloy classified according to **J-STD-006B**
- Solder paste according to **J-STD-005**
- RoHS compliant\*
- Compatible with RoHS conform solder masks
- Long tack time until 24 hours.
- Excellent print results with 16 and 20 mils pitch.

#### Physical and Chemical Properties of flux PF32G FMQ

<b>Metal content:</b>	86-89%
<b>Viscosity:</b> Malcom viscometer @ 10 rpm and 25°C	185 Pas
<b>Initial Tackiness:</b> J-STD-004, IPC-TM-650, Method 2.4.44	138 gf
<b>Slump Test:</b> JIS-Z-3284 Appendix 7; Appendix 8	pass
<b>Solder Ball Test:</b> JIS-Z-3284 Appendix 11	pass
<b>Wetting Test:</b> JIS-Z-3284 Appendix 10	pass
<b>Copper Plate Corrosion:</b> JIS-Z-3197 6.6.1	pass
<b>SIR, IPC:</b> J-STD-004, IPC-TM-650, Methode 2.6.3.3	pass

#### Standard application:

89-88,5 % Metal for stencil printing  
86-87 % Metal for dispensing

**BALVER ZINN SOLDER PASTE PF32G FMQ** is available in SN96C (SnAg3,8Cu0,7) lead free alloy.  
Type 3 powder from 45-20 micron for fine pitch applications.  
Type 4 powder from 20-38 micron is also available

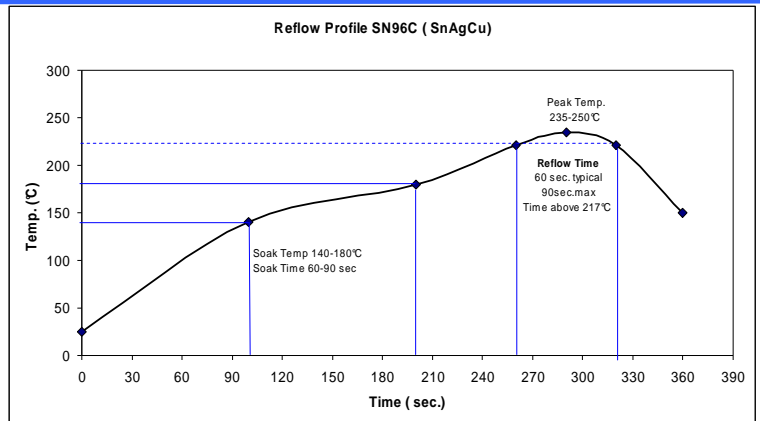
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### Recommended Reflow Profile:

The recommended reflow profile for **BALVER ZINN SOLDER PASTE PF32G FMQ SN96C** offers a wide process window allowing adjustment to suit component board loadings. The illustrated profile is based on a full convection reflow system.



### Printing Parameters:

DEK ProFlow and MPM Pumphead approved

Squeegee Blade  
Squeegee Speed  
Stencil Material  
Temperature/Humidity

Stainless steel  
Capable of a max. printing speed of 150mm/sec  
Stainless steel  
Optimal conditions are 21-25°C and 35-65% humidity.

### Cleaning:

**BALVER ZINN SOLDER PASTE PF32G FMQ SN96C** is a no clean formulation, the residues left on the board are non-conductive, non corrosive and do not require removal in most applications. Although it is a no clean formulation, the residues can be easily removed with a variety of cleaning agents used in automated cleaning systems.

### Delivery sizes:

Doses: 250g, 500g  
Syringe/Cartridges: 5cc, 10cc, 30cc, 60cc, 120cc

### Storage and shelf life:

It is recommended that **BALVER ZINN SOLDER PASTE PF32G FMQ SN96C** is stored in clean dry conditions with a temperature of 5-10°C to maintain consistent reflow and print characteristics. **BALVER ZINN SOLDER PASTE PF32G FMQ SN96C** should be equalized to room temperature prior to printing (minimum 8 hours). Do not use excessive heating. The time of storage in the original packaging at a temperature of 5 – 10°C amounts to 6 month in doses and 4 month in syringes or cartridges.

### Safety Advice

Before use please refer to the appropriate Material Safety Data Sheet.

The information in this Data Sheet is based on data considered accurate. The measured values stated are based on own measurements, but do not represent assured properties or delivery specifications. Because of the vast number of different materials and applications – also with respect to possible protective rights of third parties – Balver Zinn Josef Jost GmbH & Co. KG **cannot** accept any liability.



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