

# Sn100Ni+®

Sn99Ag+® • Sn98Ag+® • Sn96Ag+® • Sn95Ag+®



## Electronic solder

### ISO-Tin® NiGe-Electronic solder

From pure metals of first smelting

For use in wave, selective, and dip soldering baths

Format	Dimension
Approx. 0.400 kg rods	330 x 20 x 10 mm
Approx. 1.000 kg rods	330 x 20 x 20 mm
Approx. 3.500 kg blocks with hanging loop	545 x 47 x 20 mm
Also available as solid wire on spools for automatic feeding and as cones/pellets for initial filling.	

## HAL-Lote

### ISO-Tin® NiGe-HAL-solder

From pure metals of first smelting

for hot-air tinning in printed circuit board manufacturing

Format	Dimension
Approx. 0.400 kg rods	330 x 20 x 10 mm
Approx. 1.000 kg rods	330 x 20 x 20 mm
Approx. 3.500 kg blocks with hanging loop	545 x 47 x 20 mm
Also available as solid wire on spools for automatic feeding and as cones/pellets for initial filling.	

The alloys from the Sn100Ni+ family are known for their good soldering properties, shiny solder joints, and reduction of copper alloying. NiGe solder alloys have proven their reliability in numerous tests.

	Product	Alloy	EN ISO 9453	Melting range	Rec. soldering wave temperature	Application
Wave soldering	Sn100Ni+®**	Sn99.3Cu0.7AgNiGe	Sn99.25Cu0.7Ni0.05	227 °C eutectic	≥ 265 °C	Wave soldering Selective soldering Immersion soldering
	Sn100Ni+®-Refill**	Sn99.9NiGe	-	Refill for Sn100Ni+®		
	Sn99Ag+®**	Sn99Ag0.3Cu0.7NiGe	-	217 - 227 °C	≥ 260 °C	
	Sn98Ag+®**	Sn98Ag1.2Cu0.7NiGe	-	217 - 222 °C	≥ 255 °C	
	Sn96Ag+®**	Sn96.5Ag3.0Cu0.5NiGe	-	217 - 219 °C	≥ 255 °C	
	Sn95Ag+®**	Sn95.5Ag3.8Cu0.7NiGe	-	217 °C eutectic	≥ 255 °C	
HAL-tinning	HAL-Sn100Ni+®**	Sn99.3Cu0.7AgNiGe	Sn99,25Cu0,7Ni0,05	227 °C eutectic	≥ 277 °C	hot-air tinning
	HAL-Sn100Ni+®-Refill	Sn99.9NiGe	-	Refill for HAL-Sn100Ni+® (acc. to Cu-content)		
	HAL-Sn99Ag+®**	Sn99Ag0.3Cu0.7NiGe	Sn99Cu0.7Ag0.3(NiGe)	227 °C eutectic	258 - 268 °C	
	HAL-Sn99Ag+®-Refill	Sn99.7Ag0.3NiGe	-	Refill for HAL-Sn99Ag+® (acc. to Cu-content)		

\*\* Fuji-Patent: DE-Patent-No. 19816671C2; US-Patent-No. 6.179.935B1; Japan-Patent-No. 3296289

All electronic solders are of course also available as REFILL solder without copper. Our lead-free solders comply with the RoHS directive and therefore also with the ElektroG. We will be happy to provide you with a corresponding declaration of conformity. Please note the application-related advantages of our NiGe-doped electronic solders. Request our detailed product information.

# SN100-403C



## Electronic solder

### ISO-Tin® SN100-403C

**From pure metals of first smelting**

For use in wave, selective, and dip soldering baths

Format	Dimension
approx. 0.250 kg triangular rods	10 x 10 x 10 x 400 mm
approx. 1.000 kg rods	330 x 20 x 20 mm
approx. 3.500 kg Blocks with hanging loop	545 x 47 x 20 mm

Also available as solid wire on spools for automatic feeding and as cones/pellets for initial filling.

The alloys from the SN100-403C family are known for their good soldering properties, shiny solder joints, and reduction of copper alloying. The SN100-403C solder has proven its reliability in numerous tests.

## HAL-Solder

### ISO-Tin® SN100-403CL

**From pure metals of first smelting**

For hot-air tinning in printed circuit board manufacturing

Format	Dimension
approx. 0.250 kg triangular rods	10 x 10 x 10 x 400 mm
approx. 1.000 kg rods	330 x 20 x 20 mm
approx. 3.500 kg Blocks with hanging loop	545 x 47 x 20 mm

Also available as solid wire on spools for automatic feeding and as cones/pellets for initial filling.

	Product	Alloy	EN ISO 9453	Alloy No.	Melting range	Rec. soldering wave temperature	Application
wave soldering	SN100-403C *	SnCu07NiGe0.0055	Sn99.25Cu0.7Ni0.05	403	227 °C eutectic	≥ 265 °C	Wave soldering Selective soldering Immersion soldering
	SN100-403Ce *	SnNiGe0.0055	-		Refill for SN100-403C	≥ 265 °C	
	SN100-403CS *	SnCu07NiGe0.01	Sn99.25Cu0.7Ni0.05	403	227 °C eutectic	≥ 265 °C	
	SN100-403CeS *	SnNiGe0.01	-		Refill for SN100-403CS	≥ 265 °C	
	SN100-403CS+ *	SnCu07NiGe0.025	Sn99.25Cu0.7Ni0.05	403	227 °C eutectic	≥ 265 °C	
	SN100-403CeS+ *	SnNiGe0.025	-		Refill for SN100-403CS+	≥ 265 °C	
	SN100-403C3 *	SnCu3NiGe0.0055	-		227 - 310 °C	340 - 420 °C	Immersion soldering
	SN100-403C4 *	SnCu4NiGe0.0055	-		227 - 340 °C	380 - 540 °C	
HAL-tinning	SN100-403CL *	SnCu07NiGe0.0055	Sn99.25Cu0.7Ni0.05	403	227 °C eutectic	≥ 277 °C	hot-air tinning
	SN100-403CLe *	SnNiGe0.0055	-		Refill for SN100-403CL	≥ 277 °C	
	SN100-403CLe(+) *	SnNi0.15Ge0.0055	-		Refill for SN100-403CL	≥ 277 °C	
	SN100-403CLS *	SnCu07NiGe0.01	Sn99.25Cu0.7Ni0.05	403	227 °C eutectic	≥ 277 °C	
	SN100-403CLeS *	SnNiGe0.01	-		Refill for SN100-403CLS	≥ 277 °C	
	SN100-403CLeS(+) *	SnNi0.15Ge0.01	-		Refill for SN100-403CLS	≥ 277 °C	

\* Manufactured according to NIHON SUPERIOR patent: DE patent no. 69918758; European patent no. 0985486

Our lead-free solders comply with the RoHS directive and therefore also with the ElektroG. We will be happy to provide you with a corresponding declaration of conformity. Please note the application-related advantages of our NiGe-doped electronic solders. Request our detailed product information.

 **Made in Germany**