

# Technical Data Sheet

Product group: **TyIPac-AGTA**

Created on: 04.03.2022

Revised on:



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## 1. Item description

*Item description:*

**AJOINTEC Paste TyIPac-AGTA**

*Application:*

Paste for active brazing under vacuum of industrial diamonds (PCD/MCD/CVD), natural diamonds, ceramics, cubic boron nitrid (CBN) and sapphires on carrier materials such as hard metal or steel.

## 2. Norm

*AWS A5.31-92R:*

BAG-8a

*DIN EN ISO 17672:*

*(DIN EN 1044):*

## 3. Nominal composition

*Silver:* 67-71 %  $\pm 1.5$  %

*Copper:* 25-27 %  $\pm 1.5$  %

*Titanium:* 2-8 %  $\pm 1.0$  %

*Other elements:* 0.15 % Max

## 4. Physical properties

*Color:* Grey-brown

*Melting point (Solidus):* 780°C

*Flow point (Liquidus):* 780°C

*Brazing temperature range:* 820°C-870°C

## 5. Product uses

In contrast to **TyIPac-AGITA**, **TyIPac-AGTA** is suitable for product applications at higher temperatures. **TyIPac-AGTA** can be used on all common metallic and ceramic substrates. This alloy will wet industrial diamonds (MCD, CVD), as well as natural diamonds, ceramics, cubic boron nitride (CBN) and sapphires. **TyIPac-AGITA** shows good wetting characteristics on ceramic surfaces and does not require metallization or coating processes prior to dispensing. Typical applications include the brazing of cutting materials onto substrates for the manufacturing of industrial machining tools as well as the brazing typically of vacuum tubes and waveguides in electrical and electronic industry.

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## 6. Brazing characteristics

**TyIPac-AGTA** is generally used in high vacuum environment (min.  $10^{-5}$  mbar).

## 7. Properties of brazed joints

The properties of a brazed joint are dependant upon numerous factors including base metal properties, joint design, metallurgical interaction between the base metal and the filler metal.

## 8. Properties of the brazing paste/ Dispensing

The **TyIPac-AGTA** product group is available in several standard viscosities. In addition, the pastes can be adjusted in terms of viscosity and other parameters on customer request. The brazing paste is typically applied using a dosing equipment with syringes and dosing needles. The dosing can be done manually with a handheld device or via an automated dispensing system.

## 9. Product availability

**TyIPac-AGTA** will be shipped in quantities of 20 g or more. Depending on customers requirements, the brazing pastes are filled into dosing syringes in sizes of 3CC to 30CC and have a specific content weight of 5g to 100g per dosing syringe, depending on the size.

## 10. Warranty clause

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