

ALPHA[®] EXACTALLOY[®] HIGH PURITY ALLOY PREFORM

DESCRIPTION

ALPHA Exactalloy High Purity Alloy Preform is specifically designed for high reliability applications where the highest purity of alloy is critical to forming the solder joint. The product is available in common high lead and some lead free alloys, 99.99% pure. A wide range of standard shapes and sizes are available.

ALPHA Exactalloy High Purity Alloy Preform is packaged in argon or other reducing atmosphere, to eliminate the possibility of oxidation during transport and storage.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

FEATURES & BENEFITS

Features

- High 99.99% purity alloy (4N), containing less than 0.01% impurity level.
- Preform packaging consists of tape and reel (T&R), segmented trays, or bulk.
- Many standard shapes and sizes are available.
- All common high-lead alloys and many lead-free alloys are supported.
- Packaged in a reducing atmosphere to inhibit alloy oxidation during shipment and storage.

Benefits

- High 99.99% purity alloy reduces the creation of undesirable intermetallics during soldering process.
- Excellent wetting on a wide variety of surfaces.
- Reduced voiding by eliminating oxidation during shipment and storage.
- Shipped in various packaging configurations to best fit your requirements.

PRODUCT INFORMATION

ALPHA Exactalloy High Purity Alloy Preform is available in lead and lead free alloys of various sizes and shapes. The list of sizes and shapes is always updated, so consult your local ALPHA sales representative for a list of available sizes.

ALPHA Exactalloy High Purity Alloy Preform is packaged in standard tape and reel, segmented trays or bulk. Tape and reel packaging is available on 7" or 13" reels per EIA-481. Segmented trays are offered in multiple sizes and quantities of pockets to best fit your requirements. Bulk packaging, reserved for the smallest of preform sizes, are managed in resealable glass jars. All High Purity Preforms can be packaged in a reducing environment to eliminate oxidation during transportation and storage.

APPLICATION GUIDELINES

ALPHA Exactalloy High Purity Alloy Preform is ideally suited for die attach or low voiding, high reliability soldering operations using a reduction environment, typically N₂H₂ or N₂. If soldered in N₂, flux must be used as the reducing agent for oxidation.

Common die attach alloys typically contain Sn, Pb, Ag and In in varying concentrations. Lead-free solder preforms are often used in die attach operations as well. High purity lead-free alloys typically contain Sn, Ag and Cu in varying concentrations. Alpha also offers a number of specialty lead-free alloy preforms like Innolot and PowerBond™, categorized as High Purity Preforms.

RECYCLING SERVICES

We provide safe and efficient recycling services to help companies meet their environmental and legislative requirements and at the same time, maximize the value of their waste streams.

Our service collects solder dross, solder scrap, and various forms of solder paste waste. Please contact your local sales representative for recycling capabilities in your area or [link here](#).



SAFETY & WARNING

It is recommended that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use. **Safety Data Sheets are available at MacdermidAlpha.com/assembly-solutions/knowledge-base.**

STORAGE

ALPHA Exactalloy High Purity Alloy Preform handling by operators is not desired. If preforms must be handled, gloves and vacuum pens are highly recommended to prevent impurities from grease or oils from building up or physical damage. It is recommended not to open more packages as will be used in a typical work shift. To promote maximum shelf life and reduce oxidation, store all open preform packaging types in a nitrogen cabinet or similar reducing atmosphere.

CONTACT INFORMATION

To confirm this document is the most recent version, please contact
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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. READ IT THOROUGHLY PRIOR TO PRODUCT USE . Emergency safety directory assistance: US 1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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