BORDER INDUSTRIAL SOLUTIONS LLC

# Soldering Consumables Catalog

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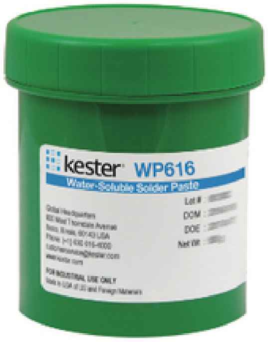
## Kester® WP616 Solder Paste



WP616 is a zero-halogen, lead-free, water soluble solder paste formula for both nitrogen and air reflow applications.

- Superior reflow characteristics
- Classified as ORM0 per J-STD-004B
- Excellent activity and printability
- Zero-Halogen (none intentionally added)
- Wide reflow profile window with good solderability
- Reflowable in air and nitrogen conditions
- Cleaning can be accomplished with heated deionized water

| Description | Price |
|---|---|
| Water Soluble, Lead-Free Solder Paste | **Call For Price** |

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## Kester® NP505-HR Solder Paste

NP505-HR is a zero-halogen, lead-free, no-clean solder paste formula developed specifically for high-reliability applications

- Zero-Halogen (none intentionally added)
- Reliable residues in harsh SIR testing with forced condensation points
- Reflowable in air and nitrogen
- Consistent print performance to 0.55AR (SAC305) and 0.57AR (Innolot)
- Low QFN/BGA voiding
- Excellent solderability across wide variety of profiles
- Compatible with most conformal coating materials
- Stable paste properties - 12-month shelf life for SAC305 and 6-month shelf life for Innolot
- Part of Kester's high-reliability product line and compatible with no-clean RF550 Rework Flux, NF372-TB Solder Flux and SELECT-10™ Selective Soldering Flux.

| Description | Price |
|---|---|
| No Clean, Lead-Free Solder Paste | **Call For Price** |

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## Kester® NP505-LT Solder Paste

NP505-LT is a no-clean, lead-free, zero-halogen solder paste for assemblies that have temperature sensitive substrates and components.

- Classified ROL0 per IPC J-STD-004B
- Zero-Halogen (none intentionally added)
- Low reflow peak temperatures (175 to 215°C)
- Reduced reflow temperatures improving efficiency in energy and cost
- Reduction in board-to-package warpage
- Low voiding potential under QFNs (< 15%)
- Wide reflow profile window with good solderability on various PCB surface finish
- Excellent activity and printability
- Extremely stable paste properties
- Colorless residues for easy post-reflow inspection

| Description | Price |
|---|---|
| No Clean, Lead-Free Solder Paste | **Call For Price** |

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## Kester® NP510-LT HRL1 Solder Paste

NP510-LT HRL1 is a no-clean, lead-free, zero-halogen solder paste for assemblies that have temperature sensitive substrates and components.

- Classified ROL0 per IPC J-STD-004B
- Zero-Halogen (none intentionally added)
- Lower reflow peak temperature (180 to 190°C) compared to traditional lead-free alloys
- Reduction in board-to-package warpage
- Wide reflow profile window with good solderability on various PCB surface finish
- Excellent printability above 0.60 area ratio
- Colorless residues for easy post-reflow inspection
- Low voiding in various packages - BGA, MLG, DPAK, LGA

| Description | Price |
|---|---|
| No Clean, Lead-Free Solder Paste | **Call For Price** |

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## Kester® 985M Soldering Flux Alcohol-Based

985M is a low-solids, halide-free, no-clean flux that is designed for wave solder and touch up processes.

- Improves soldering performance
- Eliminates the need and expense of cleaning
- Non-corrosive tack-free residues
- Classified as ORL0 under IPC JSTD-004 and ORM0 under IPC JSTD-004B

| Description | Price |
|---|---|
| No Clean Soldering Flux | **Call For Price** |

## Kester® NF372-TB Soldering Flux Alcohol-Based

NF372-TB is a zero-halogen, no-clean, low-solids liquid flux designed to be used in wave and hand soldering processes.

- Zero-Halogen (none intentionally added)
- Provides good solderability under air atmosphere
- Classified ROL0 per IPC J-STD-004B
- Non-corrosive, non-conductive and non-tacky residues
- Pass SIR in raw state (unheated boards dried at 25°C/50%RH for 24 hours before test)
- Compliant to GR-78-CORE (Telcordia/Bellcore)
- Ability to provide desired hole-fill with preheat temperatures up to 140°C
- Safe for rework (available in flux-pens)
- Part of Kester's high-reliability product line and compatible with NP505-HR Solder Paste, RF550 Rework Flux and SELECT-10™ Selective Soldering Flux

| Description | Price |
|---|---|
| No Clean Soldering Flux | Call For Price |

## Kester® 2331-ZX Soldering Flux Alcohol-Based

2331-ZX is an innovation in organic acid water soluble flux chemistry for soldering circuit board assemblies.

- High activity
- Minimizes icicling and bridging
- pH Neutral Chemistry
- Classified as ORH1 per J-STD-004B
- Chemically compatible with most solder masks and board laminates

| Description | Price |
|---|---|
| Water Soluble Soldering Flux | Call For Price |

## Kester® 2235 Soldering Flux Alcohol-Based

2235 is a high activity 11% solids organic flux designed for automated soldering of circuit board assemblies where a more aggressive flux is required, but reliability considerations are paramount.

- High activity
- Minimizes icicling and bridging
- Excellent choice for surface mount boards
- Classified as ORH1 under J-STD-004
- Chemically compatible with most solder masks and board laminates
- High ionic cleanliness and no surface insulation resistance degradation

| Description | Price |
|---|---|
| No Clean Soldering Flux | Call For Price |

## Kester® Select-10™ Selective Soldering Flux Alcohol-Based

SELECT-10™ is a zero-halogen, no-clean liquid flux designed specifically for the needs of the selective soldering process.

- Zero-Halogen (none intentionally added)
- Provides good solderability under air atmosphere
- Controlled flux application, flux does not spread beyond the spray pattern
- No Clogging
- Compliant to GR-78-CORE (Telcordia/Bellcore)
- Classified as ROL0 per J-STD-004B
- Pass SIR in raw and preheating condition
- Also available as a flux-pen
- Non-corrosive, non-conductive and non-tacky residues
- Ability to provide desired hole-fill with preheat temperatures over 140°C
- Part of Kester's high-reliability product line and compatible with NP505-HR Solder Paste, RF550 Rework Flux and NF372-TB Soldering Flux

| Description | Price |
|---|---|
| No Clean Soldering Flux | Call For Price |

## Kester® RF550 Rework Flux

RF550 is a high-reliability, zero-halogen, no-clean rework flux designed for electronic component rework and repair applications.

- Zero-Halogen (none intentionally added)
- Classified as ROL0 per J-STD-004B
- Part of Kester's high-reliability product line and compatible with NP505-HR Solder Paste, NF372-TB Soldering Flux and SELECT-10™ Selective Soldering Flux.

| Description | Price |
|---|---|
| No Clean Rework Flux | Call For Price |

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# Solder Wire

## Robotic Soldering

AIM's cored solder wire for robotic soldering is engineered to promote fast thermal transfer and extend solder tip life. AIM's solders allow high feed rates for point-to-point and drag soldering with excellent barrel fill. Post solder residue is minimal, clear and passes J-STD-004A/B and JIS AA requirements. Specialized spooling minimizes jams and drifting.

## Hand Soldering

AIM's cored solder wire for hand soldering is operator friendly, producing low odor and smoke. AIM's solder wire is engineered to promote thermal transfer and fast wetting, eliminating the need to use additional flux.

## No Clean Solder Wire

AIM's no clean cored solder wire provides excellent wetting properties combined with a wide process window, as well as superior solder penetration into plated through holes with minimal, clear residues. AIM's no clean solder wire offerings are REACH and RoHS compliant, halogen-free and pass J-STD-004A/B and JIS AA requirements.

## Water Soluble Solder Wire

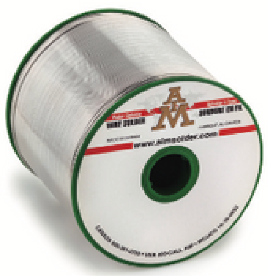
AIM's water soluble cored solder wire's activator system offers rapid oxide removal resulting in faster wetting and maximum capillary action. Water soluble cored solder wire residues can be easily removed using heated DI water alone.

## Rosin Based Solder Wire

AIM's rosin based cored solder wire is designed for use where high activity flux is required. AIM's rosin mildly activated (RMA) and rosin activated (RA) cored solder wire provides powerful performance on oxidized or uncleaned surfaces with excellent thermal transfer and wetting properties.

RX18 No-Clean Solder Wire

CX18 No-Clean Solder Wire



OAJ Water Soluble Solder Wire

WS482 Water Soluble Solder Wire

RMA Rosin Solder Wire

| Part No. | Flux Type | Standard Alloys | Halogen-Free | Description | Price |
|---|---|---|---|---|---|
| RX18 | No-Clean | REL22™, REL61™, SAC, SN100C, Sn/Pb, and Sn/Cu Alloys | Yes | Engineered for robotic soldering, No voids - No skips<br>Fast wetting and feed rates, Extends solder tip life<br>Rapid solder penetration on through hole components | **Call for Price** |
| CX18 | No-Clean | REL22™, REL61™, SAC, SN100C, Sn/Pb, and Sn/Cu Alloys | Yes | Fast wetting, Minimal and clear residue<br>Extends solder tip life, Low odor/fumes | **Call for Price** |
| OAJ | Water Soluble | SAC and Sn/Pb Alloys | No | High flux activity level, Excellent wetting<br>Reduces oxidation of solder iron tip, Remove residues with DI water | **Call for Price** |
| WS482 | Water Soluble | SAC and SN100C Alloys | No | Halide-free, Excellent wetting and thermal transfer<br>High flux activity level | **Call for Price** |
| RMA | Rosin | SN/Pb Alloys | No | Promotes thermal transfer, ROLO per J-STD-004B<br>Glycol free, Fast wetting properties | **Call for Price** |

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# SN100C® Lead-Free Bar Solder

SN100C is a lead-free solder alloy that is comprised of tin, copper, germanium, and nickel. It offers user-friendly properties, high-throughput and the lowest cost of ownership as compared to any other lead-free solder alloy.

| Part No. | Price |
|---|---|
| AB-SN100C | **Call for Price** |

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# Sn63/Pb37 Electropure Bar Solder

AIM Sn63/Pb37 Electropure Bar Solder is processed in a proprietary method that removes dirt and reduces dissolved oxides to a minimum. The result is an extremely pure, low drossing solder bar that increases throughput and decreases defects.

| Part No. | Price |
|---|---|
| AB-6337 | **Call for Price** |

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## REL61™ Lead-Free Bar Solder

REL61™ alloy is comprised of tin, bismuth, silver, copper and trace amounts of elemental grain structure refiners. REL61 has proven to reduce tin whisker formation as well as outperforming SAC alloys in thermal shock, vibration and drop shock resistance.

| Part No. | Price |
|---|---|
| REL61 | **Call for Price** |

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## REL22™ High Reliability Lead-Free Bar Solder

REL22™ alloy is comprised of tin, bismuth, silver, copper, antimony, nickel and trace amounts of elemental grain structure refiners. The alloy provides significantly improved durability for use in applications where thermal shock, vibration and high g-forces are a concern.

| Part No. | Price |
|---|---|
| REL22 | **Call for Price** |

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## Solder Paste

### No-Clean Solder Paste

AIM's no clean solder paste combines performance and reliability without the expense of cleaning. Designed to provide stable transfer efficiencies, powerful wetting, and low voiding, AIM no clean solder pastes address current and future assembly challenges. AIM's full line of no clean solder paste is available in a wide selection of alloys to meet your process requirements.

### Water Soluble Solder Paste

AIM's water soluble solder paste products have been engineered for powerful wetting and exceptional print performance even in high humidity environments. AIM water soluble paste residues are easily removed with DI water alone up to 48 hours after reflow, even under low stand-off devices. AIM's formulations provide a low foaming solder paste that can extend closed loop filtration service life. Call for powder sizes.

### RMA/RA Solder Paste

AIM's RMA/RA solder pastes are designed for use where mil spec performance is required. AIM rosin based solder pastes provide modern paste print performance combined with traditional military compliance. Additionally, AIM's RMA/RA solder pastes can withstand extended hot reflow profiles required for backplane and thermally massive assemblies. AIM's rosin solder pastes provide superior performance on oxidized or uncleaned surfaces and long pause-to-print capabilities. Call for powder sizes.

### Low Temperature Solder Paste

AIM's low temperature solder paste offers exceptional performance combined with peak reflow temperatures as low as 170°C. AIM's NC273LT solder paste provides 8+ hour stencil life, stable transfer efficiency and excellent wetting, while eliminating solder balling that is common with bismuth bearing pastes. Call for powder sizes.

No-Clean
Solder Paste

Water Soluble
Solder Paste

Low Temperature
Solder Paste

RMA/RA
Solder Paste

| Part No. | Flux Type | Standard Alloys | Halogen Free | Dispensing Capability | Description | Price |
|---|---|---|---|---|---|---|
| M8 | No-Clean | REL22™, REL61™, SAC, SN100C, SN/Pb and SN/Cu Alloys | Yes | Yes | Low voiding, Fine pitch printing, Mitigates print defects (HiP), Minimal, transparent and easy to clean residues | **Call for Price** |
| NC273LT | No-Clean | SN/Bi Alloys | Yes | Yes | Used for low or reduced temperature applications, Improved wetting for use with bismuth alloys, 8+ hour stencil life | **Call for Price** |
| J8 | No-Clean | SAC and SN/Pb Alloys | Yes | Jetting | Low voiding, No skips, Capable of 200μm deposits | **Call for Price** |
| NC257MD | No-Clean | SAC305 and Sn63/Pb37 Alloys | Yes | Jetting | For use in Mycronic Jet Printers, Prolongs ejector life, Reduces voiding | **Call for Price** |
| W20 | Water Soluble | SAC305 | Yes | No | Halogen/Halide Free, Residue easily cleaned in DI water, 8+ hour stencil life, 2+ hour extended cleaning window | **Call for Price** |
| WS488 | Water Soluble | SAC and SN/Pb Alloys | No | Yes | Excellent wetting, Residue easily cleaned in DI water, Superior slump resistance, 8+ hour stencil life | **Call for Price** |
| RMA258-15R | Rosin | SAC and SN/Pb Alloys | No | Yes | Long pause-to-print, Reduced voiding, For use during long, hot reflow profiles | **Call for Price** |

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# Liquid and Paste/Tack Flux

No-Clean Flux

## No-Clean Flux

AIM's no-clean flux is designed to leave minimal, electrochemically safe post-process residues. AIM's no-clean flux provides fast wetting and increased PTH barrel fill while reducing common soldering defects including bridging and solder balls. AIM's no-clean flux activation system has a wide process window that can withstand high process temperatures

## VOC-Free Flux

AIM's VOC-free liquid flux products are environmentally friendly, water based fluxes with exceptional performance and reliability characteristics. AIM's VOC-free line offers excellent barrel fill and wetting performance with a wide process window.

Paste Flux

## Paste Flux

AIM's paste flux is available in no clean, water soluble, and rosin based chemistries. AIM's paste flux is for use in rework applications, general touch up, rework of PCBs, BGA rework and ball sphere attachment applications.

| Part No. | Flux Type | Soldering | Description | Price |
|---|---|---|---|---|
| FX16 | No-Clean | Wave, Selective | Halide/halogen-free, High SIR performance, Fast wetting and broad process window | **Call for Price** |
| NC280 | No-Clean | Selective, Rework/Hand | Ideal for rework applications, Halide-free, High reliability applications, Passes SIR unheated | **Call for Price** |
| NC217 Gel Flux | No-Clean | Rework/Hand | Ideal for BGA rework, Wide process window Low voiding, passes SIR unheated | **Call for Price** |
| NC Paste Flux | No-Clean | Rework/Hand | Excellent wetting, Ideal for rework and attaching spheres to BGA packages | **Call for Price** |

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# RMA/RA Flux

AIM's rosin based liquid flux is designed for use in avionic and military type applications with non-corrosive residues that can easily be cleaned using a solvent or saponifier. It provides improved soldering performance, excellent thermal transfer and can be foamed, sprayed or dipped. Ideal for wave soldering.

- Non-corrosive/non-conductive cleanable residue
- Military/high reliability applications
- IPC-A-610F class 3 compliant

| Part No. | Price |
|---|---|
| RMA202-25 | **Call for Price** |

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# Water Soluble Flux

AIM's water soluble flux products offer a wide process widow with superior wetting characteristics and easy to clean post process residues. Ideal for wave & selective soldering.

- Residues easy to clean with DI water
- pH neutral
- Low foaming in wash
- Excellent wetting

| Part No. | Price |
|---|---|
| WS715M | **Call for Price** |