



2017 Halogen-Free Product Certificate of Compliance

All Halogen-Free products meet the requirements of the following standards:

- JEDEC
- IEC 61249
- JPCA-ES-01-2003
- IPC-4101B

Most organizations, including IPC, have adopted, the levels developed by the International Electrochemical Commission (IEC) as acceptable. Therefore, the halogen-free products listed in the attached Kester product tables are compliant based on the maximum concentration values (MCV) for the restricted substances as specified below.

| Material | Maximum Limit (ppm) |
|---------------|---------------------|
| Chlorine (Cl) | 900 ppm |
| Bromine (Br) | 900 ppm |
| Total Halogen | 1500 ppm |

Zero-halogen products contain no intentionally added halogens, surpassing the halogen-free requirement. These products are also listed in the attached tables.

This Certificate of Compliance will be updated to reflect changes in restricted substances. Kester does not provide any warranty with respect to the information provided from this Certificate of Compliance. The Terms and Conditions of Sale under which customers purchased Kester solder products shall continue to apply.

Other updated product compliance declarations can be downloaded from our website at www.kester.com, including:

- RoHS (Restriction of Hazardous Substances) Product Certificates(s) of Compliance
- REACH Substance of Very High Concern (SVHC)
- EICC Conflict Minerals Reporting Template (CMRT)

Should you require additional information, please send your requests to: customerservice@kester.com.



Halogen-Free Liquid Solder Flux Products

| Product Name | Description | Kester Part # | Halogen-Free | Zero-Halogen |
|---------------------------|---|---------------|--------------|--------------|
| 1800 Soldering Flux | 1800 Soldering Flux 1 GAL | 6300001800 | Yes | |
| 2120 Soldering Flux | 2120 Soldering Flux 1 GAL | 6300002120 | Yes | |
| 2120 Soldering Flux | 2120 Soldering Flux 5 GAL | 6400002120 | Yes | |
| 2120 Soldering Flux | 2120 Soldering Flux 53 GAL | 6500002120 | Yes | |
| 2125 Soldering Flux | 2125 Soldering Flux 20 LIT | 6600002125 | Yes | Yes |
| 2164 Soldering Flux | 2164 20LITS P | FC0595 | Yes | Yes |
| 2166-BN Soldering Flux | 2166-BN Soldering Flux 1 GAL | 6300252166 | Yes | Yes |
| 2166-BN Soldering Flux | 2166-BN Soldering Flux 53 GAL | 6500252166 | Yes | Yes |
| 2166-BN Soldering Flux | 2166-BN Soldering Flux 20 LIT | 6600252166 | Yes | Yes |
| 2169 Soldering Flux | 2169 Soldering Flux 20 LIT | 6600002169 | Yes | Yes |
| 5252 Cleaner | 5252 20LITS P | 6600005252 | Yes | |
| 5252M Cleaner | 5252-M 20LITS M | FC2117 | Yes | |
| 5252M Cleaner | 5252-M 20LITS M MS | FC2127 | Yes | |
| 8680 RMA-A Soldering Flux | 8680 RMA-A HALIDE FREE CHEMICAL FLUX 500ml Bottle | 601201 | Yes | Yes |
| 920-CXF Soldering Flux | 920-CXF Soldering Flux 1 GAL | 6303460920 | Yes | Yes |
| 920-CXF Soldering Flux | 920-CXF Soldering Flux 53 GAL | 6403460920 | Yes | Yes |
| 920-CXF Soldering Flux | 920-CXF Soldering Flux 5 GAL | 6503460920 | Yes | Yes |
| 920-CXF Soldering Flux | 920-CXF Soldering Flux 20 LIT | 6603460920 | Yes | Yes |



| Product Name | Description | Kester Part # | Halogen-Free | Zero-Halogen |
|-----------------------|------------------------------|---------------|--------------|--------------|
| 922-CX Soldering Flux | 922-CX Soldering Flux 1 GAL | 6300340922 | Yes | Yes |
| 922-CX Soldering Flux | 922-CX Soldering Flux 5 GAL | 6400340922 | Yes | Yes |
| 922-CX Soldering Flux | 922-CX Soldering Flux 53 GAL | 6500340922 | Yes | Yes |
| 950E Soldering Flux | 950E Soldering Flux 1 GAL | 6300050950 | Yes | Yes |
| 950E Soldering Flux | 950E Soldering Flux 5 GAL | 6400050950 | Yes | Yes |
| 950E Soldering Flux | 950E Soldering Flux 53 GAL | 6500050950 | Yes | Yes |
| 951 Flux-Pen® | 951 Flux-Pen 20 CTN | 8310000951 | Yes | Yes |
| 951 Soldering Flux | 951 Soldering Flux 1 GAL | 6300000951 | Yes | Yes |
| 951 Soldering Flux | 951 Soldering Flux 5 GAL | 6400000951 | Yes | Yes |
| 951 Soldering Flux | 951 Soldering Flux 53 GAL | 6500000951 | Yes | Yes |
| 951 Soldering Flux | 951 Soldering Flux 20 LIT | 6600000951 | Yes | Yes |
| 952-D6 Flux-Pen® | 952-D6 Flux-Pen 20 CTN | 8310460952 | Yes | Yes |
| 952-D6 Soldering Flux | 952-D6 Soldering Flux 1 GAL | 6300460952 | Yes | Yes |
| 952-D6 Soldering Flux | 952-D6 Soldering Flux 53 GAL | 6500460952 | Yes | Yes |
| 952-S Soldering Flux | 952-S Soldering Flux 1 GAL | 6300010952 | Yes | Yes |
| 952-S Soldering Flux | 952-S Soldering Flux 5 GAL | 6400010952 | Yes | Yes |
| 952-S Soldering Flux | 952-S Soldering Flux 53 GAL | 6500010952 | Yes | Yes |
| 952-S Soldering Flux | 952-S Soldering Flux 20 LIT | 6300010952 | Yes | Yes |



| Product Name | Description | Kester Part # | Halogen-Free | Zero-Halogen |
|-----------------------------------|---------------------------------------|---------------|--------------|--------------|
| NF372-TB Flux-Pen® | NF372-TB Flux-Pen 20 CTN | 8310000372 | Yes | Yes |
| NF372-TB Soldering Flux | NF372-TB Soldering Flux 1 GAL | 6300022372 | Yes | Yes |
| NF372-TB Soldering Flux | NF372-TB Soldering Flux 5 GAL | 6400022372 | Yes | Yes |
| NF372-TB Soldering Flux | NF372-TB Soldering Flux 53 GAL | 6500022372 | Yes | Yes |
| SELECT-10™ Selective Solder Flux | SELECT-10 Selective Solder Flux 5 GAL | 6400018010 | Yes | Yes |
| SELECT-10™ Selective Solder Flux | SELECT-10 Selective Solder Flux 1 LIT | 6700018010 | Yes | Yes |
| SELECT-10™ Selective Solder Flux | SELECT-10 Selective Solder Flux 1 GAL | 6300018010 | Yes | Yes |
| SELECT-3.9™ Selective Solder Flux | SELECT-10 Selective Solder Flux 1 GAL | 6300019039 | Yes | Yes |
| SELECT-3.9™ Selective Solder Flux | SELECT-10 Selective Solder Flux 5 GAL | 6400019039 | Yes | Yes |
| SELECT-3.9™ Selective Solder Flux | SELECT-10 Selective Solder Flux 1 LIT | 6700019039 | Yes | Yes |
| SF800-LR Soldering Flux | SF800-LR 20 LITS P | 6600020800 | Yes | Yes |
| SF800-LR Soldering Flux | SF800-LR Soldering Flux 1 GA | 6300020800 | Yes | Yes |

Halogen-Free Solder Paste and Rework Flux Products

| Product Name | Description | Kester Part # | Halogen-Free | Zero-Halogen |
|-----------------------|---|---------------|--------------|--------------|
| EM919G Solder Paste | EM919G 12% Sn96.5Ag3Cu.5 25-45µ 500g J | 41500598 | Yes | |
| NP505-HR Solder Paste | NP505-HR Sn96.5Ag3.0Cu0.5 T3 88.5% 500g JAR | 7040210810 | Yes | Yes |
| NP505-HR Solder Paste | NP505-HR Sn96.5Ag3.0Cu0.5 T3 88.5% 600g CRT | 7040210811 | Yes | Yes |



| Product Name | Description | Kester Part # | Halogen-Free | Zero-Halogen |
|-----------------------|---|---------------|--------------|--------------|
| NP505-HR Solder Paste | NP505-HR Sn96.5Ag3.0Cu0.5 T4 88.5% 500g JAR | 7040211410 | Yes | Yes |
| NP505-HR Solder Paste | NP505-HR Sn96.5Ag3.0Cu0.5 T4 88.5% 600g CRT | 7040211411 | Yes | Yes |
| NP505-HR Solder Paste | NP505-HR 11.5% Sn96.5Ag3Cu0.5 20- 38 μ 500g J | 41500643 | Yes | Yes |
| NP505-HR Solder Paste | NP505-HR 11.5% Sn96.5Ag3Cu0.5 25- 45 μ 500g J | 41500644 | Yes | Yes |
| NP505-HR Solder Paste | NP505-HR 11.5% Sn96.5Ag3Cu0.5 25- 45 μ 600g C | 41500646 | Yes | Yes |
| NP545 Solder Paste | NP545 Sn96.5Ag3.0Cu0.5 T3 88.5% 500g JAR | 7041050810 | Yes | Yes |
| NP545 Solder Paste | NP545 Sn96.5Ag3.0Cu0.5 T3 88.5% 600g CRT | 7041050811 | Yes | Yes |
| NP545 Solder Paste | NP545 Sn96.5Ag3.0Cu0.5 T4 88.3% 500g JAR | 7041050910 | Yes | Yes |
| NP545 Solder Paste | NP545 Sn96.5Ag3.0Cu0.5 T4 88.3% 600g CRT | 7041050911 | Yes | Yes |
| NP545 Solder Paste | NP545 Sn96.5Ag3.0Cu0.5 T4 88.5% 750g DEK | 7041050919 | Yes | Yes |
| RF550 Rework Flux | Rework Flux 30g SYR | 7040010003 | Yes | Yes |

Halogen-Free Tacky Solder Flux Products

| Product Name | Description | Kester Part # | Halogen-Free | Zero-Halogen |
|--------------|--------------------|---------------|--------------|--------------|
| TSF-6522RH | TSF-6522RH 10g SYR | 301002 | Yes | |
| TSF-6522RH | TSF-6522RH 10g SYR | 901002 | Yes | |
| TSF-6522RH | TSF-6522RH 30g SYR | 301003 | Yes | |



| Product Name | Description | Kester Part # | Halogen-Free | Zero-Halogen |
|--------------|---------------------|---------------|--------------|--------------|
| TSF-6522RH | TSF-6522RH 30g SYR | 901003 | Yes | |
| TSF-6522RH | TSF-6522RH 100g JAR | 301004 | Yes | |
| TSF-6522RH | TSF-6522RH 100g JAR | 901004 | Yes | |
| TSF-8808 | TSF-8808 30 | 301303 | Yes | Yes |
| TSF-8818HF | TSF-8818HF 30g SYR | 301903 | Yes | Yes |
| BAF-1488HF | BAF-1488HF 150g CRT | 301905 | Yes | Yes |

Halogen-Free Flux-Cored Wire Products

| Product Name | Description | Kester Part # | Alloy | Flux | Diameter | Halogen-Free | Zero-Halogen |
|---------------------|---------------------------------|---------------|--------|------|----------|--------------|--------------|
| 296 Flux-Cored Wire | 296 965A3C05 58 025M 010 005 | WI3674 | SAC305 | 296 | 0.25mm | Yes | Yes |
| 296 Flux-Cored Wire | 296 965A3C05 58 040M 025 125 | WI3675 | SAC305 | 296 | 0.4mm | Yes | Yes |
| 296 Flux-Cored Wire | 296 965A3C05 58 050M 025 125 | WI3676 | SAC305 | 296 | 0.5mm | Yes | Yes |
| 296 Flux-Cored Wire | 296 965A3C05 58 060M 050 125 | WI3666 | SAC305 | 296 | 0.6mm | Yes | Yes |
| 296 Flux-Cored Wire | 296 965A3C05 58 080M 050 125 | WI3660 | SAC305 | 296 | 0.8mm | Yes | Yes |
| 296 Flux-Cored Wire | 296 965A3C05 58 100M 050 125 | WI3661 | SAC305 | 296 | 1.0mm | Yes | Yes |