



**WERBEL MICROWAVE LLC**

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**RoHS Compliance Statement**

All applicable products manufactured by Werbel Microwave LLC that are designated as RoHS compliant, to the best of our knowledge, meet the requirements for compliance to the RoHS3 (Restriction of Hazardous Substances) Directive as set forth by the European Union Directive 2015/863 within the specified limits:

|                                                            |                                            |
|------------------------------------------------------------|--------------------------------------------|
| Lead (Pb) < 0.1% (< 1,000 PPM)                             | Bis(2-ethylhexyl) phthalate (DEHP) (0.1 %) |
| Mercury (Hg) < 0.1% (< 1,000 PPM)                          | Butyl benzyl phthalate (BBP) (0.1 %)       |
| Cadmium (Cd) < 0.01% (< 100 PPM)                           | Dibutyl phthalate (DBP) (0.1 %)            |
| Hexavalent Chromium (CrVI) < 0.1% (< 1,000 PPM)            | Diisobutyl phthalate (DIBP) (0.1 %)        |
| Polybrominated Biphenyls (PBB) < 0.1% (< 1,000 PPM)        |                                            |
| Polybrominated Diphenyl Esters (PbDE) < 0.1% (< 1,000 PPM) |                                            |

**R.E.A.C.H. Compliance Statement**

All applicable products manufactured by Werbel Microwave LLC that are designated as REACH compliant, to the best of our knowledge, do not contain any of the Substances of Very High Concern included on the Candidate List effective 6/16/2014, according to EC Regulation Number 1907/2006 ("REACH"), in concentrations above 0.1% by weight.

**Designation/Identification**

- \* As of 3/9/2018: All products by default use lead free solder and to the best of our knowledge, do not contain the substances in concentrations by weight greater than the specified limits.
- \* Products calling for the use of lead solder and/or other materials not in compliance with the RoHS and/or REACH directives are handled on a case-by-case basis by designating a separate part number with mention of materials on the product-specific specification sheet.

**Summary**

|                 |                                    |              |                  |
|-----------------|------------------------------------|--------------|------------------|
| Model:          | WMC-6-18-30dB-S                    | Prepared on: | December 1, 2024 |
| Description:    | Coupler, 6-18GHz, 30dB, SMA Female |              |                  |
| RoHS Compliant: | Yes                                | Weight:      | 22166.874 mg     |

**Material declarations provided by Werbel Microwave are:**

- i. Based on information provided by our suppliers;
- ii. Limited to the date here of.
- iii. Based upon and subject to the material content and compliant methodologies, assumptions and qualifications set forth.
- iv. Provided as a courtesy for informational purposes only and shall not form part of a contract nor warranty.
- v. Subject to change without notice.

Method of quantity/percentage determination based on weight analysis, calculated estimates, or similarity, and represent the materials used at the time of this report.

- 0 in Parts Per Million column indicates less than 1 PPM.
- 0 in Weight column indicates less than 0.001 mg.
- 0 in % column indicates less than 0.01%.

PRODUCT SUMMARY

| Constituent                     | CAS No.     | Parts Per Million<br>(PPM) | Weight<br>in mg | %      |
|---------------------------------|-------------|----------------------------|-----------------|--------|
| CHECKSUM                        |             | 1000000                    | 22166.874       | 100.00 |
| ALUMINUM                        | 7429-90-5   | 327832                     | 7267.014        | 32.78  |
| IRON                            | 7439-89-6   | 146865                     | 3255.546        | 14.69  |
| MAGNESIUM                       | 7439-95-4   | 3366                       | 74.610          | 0.34   |
| STAINLESS STEEL                 | 12597-68-1  | 299384                     | 6636.414        | 29.94  |
| CHROMIUM                        | 7440-47-3   | 40503                      | 897.819         | 4.05   |
| SILICON                         | 7440-21-3   | 3256                       | 72.183          | 0.33   |
| NICKEL                          | 7440-02-0   | 23207                      | 514.418         | 2.32   |
| COPPER                          | 7440-50-8   | 673                        | 14.922          | 0.07   |
| ZINC                            | 7440-66-6   | 421                        | 9.326           | 0.04   |
| MANGANESE                       | 7439-96-5   | 3544                       | 78.554          | 0.35   |
| TITANIUM                        | 7440-32-6   | 252                        | 5.596           | 0.03   |
| ACRYLIC RESIN                   | 28262-63-7  | 0                          | 0.000           | 0.00   |
| POLYESTER                       | 24980-41-4  | 0                          | 0.000           | 0.00   |
| CARBON                          | 7440-44-0   | 126                        | 2.788           | 0.01   |
| PHOSPHORUS                      | 7723-14-0   | 42                         | 0.929           | 0.00   |
| SULFUR                          | 7704-34-9   | 31                         | 0.697           | 0.00   |
| FUSED SILICA                    | 60676-86-0  | 0                          | 0.000           | 0.00   |
| CONTINUOUS FILAMENT FIBER GLASS | 65997-17-3  | 0                          | 0.000           | 0.00   |
| CERAMIC FILLER                  | N/A         | 0                          | 0.000           | 0.00   |
| POLYETHYLENE GLYCOL DIMETHACRY  | 25852-47-5  | 8                          | 0.180           | 0.00   |
| CUMENE HYDROPEROXIDE            | 80-15-9     | 1                          | 0.020           | 0.00   |
| BISPHENOL A FUMARATE RESIN      | 39382-25-7  | 8                          | 0.180           | 0.00   |
| SACCHARIN                       | 81-07-2     | 1                          | 0.020           | 0.00   |
| BERYLIUM                        | 7440-41-7   | 0                          | 0.000           | 0.00   |
| PLATED GOLDC17300               | 7440-57-5   | 0                          | 0.000           | 0.00   |
| PTFE & PEI                      | 9002-84-0   | 23395                      | 518.584         | 2.34   |
| ALUMINA - CERAMIC               | 1344-28-1   | 112423                     | 2492.068        | 11.24  |
| PALLADIUM                       | 7440-05-3   | 58                         | 1.286           | 0.01   |
| SILVER                          | 7440-22-4   | 3589                       | 79.557          | 0.36   |
| RUTHENIUM DIOXIDE               | 12036-10-1  | 409                        | 9.066           | 0.04   |
| SILICON DIOXIDE                 | 7631-86-9   | 4238                       | 93.949          | 0.42   |
| MAGNESIUM OXIDE                 | 1309-48-4   | 937                        | 20.766          | 0.09   |
| BORON OXIDE                     | 1303-86-2   | 359                        | 7.956           | 0.04   |
| EPOXY RESIN - 3                 | 129915-35-1 | 1215                       | 26.936          | 0.12   |
| COPPER OXIDE                    | 1317-38-0   | 158                        | 3.507           | 0.02   |
| CHROME (III) OXIDE              | 1308-38-9   | 325                        | 7.194           | 0.03   |
| MANGANESE DIOXIDE               | 1313-13-9   | 54                         | 1.197           | 0.01   |
| TITANIUM DIOXIDE                | 13463-67-7  | 45                         | 0.992           | 0.00   |
| TIN-100                         | 7440-31-5   | 3275                       | 72.597          | 0.33   |

PRODUCT COMPONENT DETAILS

| Constituent                     | Description | CAS No.    | Weight in mg | %      |
|---------------------------------|-------------|------------|--------------|--------|
| ENCLOSURE                       |             |            | 3638.000     | 100.00 |
| ALUMINUM                        | ALLOY 6061  | 7429-90-5  | 3543.412     | 97.40  |
| MAGNESIUM                       | ALLOY 6061  | 7439-95-4  | 36.380       | 1.00   |
| SILICON                         | ALLOY 6061  | 7440-21-3  | 21.828       | 0.60   |
| IRON                            | ALLOY 6061  | 7439-89-6  | 12.733       | 0.35   |
| COPPER                          | ALLOY 6061  | 7440-50-8  | 7.276        | 0.20   |
| CHROMIUM                        | ALLOY 6061  | 7440-47-3  | 6.367        | 0.18   |
| ZINC                            | ALLOY 6061  | 7440-66-6  | 4.548        | 0.13   |
| MANGANESE                       | ALLOY 6061  | 7439-96-5  | 2.729        | 0.08   |
| TITANIUM                        | ALLOY 6061  | 7440-32-6  | 2.729        | 0.08   |
| COVER(S)                        |             |            | 3823.000     | 100.00 |
| ALUMINUM                        | ALLOY 6061  | 7429-90-5  | 3723.602     | 97.40  |
| MAGNESIUM                       | ALLOY 6061  | 7439-95-4  | 38.230       | 1.00   |
| SILICON                         | ALLOY 6061  | 7440-21-3  | 22.938       | 0.60   |
| IRON                            | ALLOY 6061  | 7439-89-6  | 13.381       | 0.35   |
| COPPER                          | ALLOY 6061  | 7440-50-8  | 7.646        | 0.20   |
| CHROMIUM                        | ALLOY 6061  | 7440-47-3  | 6.690        | 0.18   |
| ZINC                            | ALLOY 6061  | 7440-66-6  | 4.779        | 0.13   |
| MANGANESE                       | ALLOY 6061  | 7439-96-5  | 2.867        | 0.08   |
| TITANIUM                        | ALLOY 6061  | 7440-32-6  | 2.867        | 0.08   |
| HARDWARE                        |             |            | 4647.000     | 100.00 |
| IRON                            | SS 18-8     | 7439-89-6  | 3229.433     | 69.50  |
| CHROMIUM                        | SS 18-8     | 7440-47-3  | 884.324      | 19.03  |
| NICKEL                          | SS 18-8     | 7440-02-0  | 428.453      | 9.22   |
| MANGANESE                       | SS 18-8     | 7439-96-5  | 72.958       | 1.57   |
| SILICON                         | SS 18-8     | 7440-21-3  | 27.417       | 0.59   |
| CARBON                          | SS 18-8     | 7440-44-0  | 2.788        | 0.06   |
| PHOSPHORUS                      | SS 18-8     | 7723-14-0  | 0.929        | 0.02   |
| SULFUR                          | SS 18-8     | 7704-34-9  | 0.697        | 0.02   |
| PRINTED CIRCUIT BOARD           |             |            | 1291.452     |        |
| Fused Silica                    |             | 60676-86-0 | Varies       | Varies |
| Continuous Filament Fiber Glass |             | 65997-17-3 | Varies       | Varies |
| Ceramic Filler                  |             | N/A        | Varies       | Varies |
| CLADDING                        |             |            |              |        |
| Copper                          |             | 231-159-6  | Varies       | Varies |
| Aluminium                       |             | 231-072-3  | Varies       | Varies |
| Zinc                            |             | 231-175-3  | Varies       | Varies |

PRODUCT COMPONENT DETAILS (CONTINUED)

| Constituent                    | Description     | CAS No.     | Weight in mg | %      |
|--------------------------------|-----------------|-------------|--------------|--------|
| SOLDER WIRE / PASTE / EPOXY    |                 |             | 0.400        | 100.00 |
| POLYETHYLENE GLYCOL DIMETHACRY |                 | 25852-47-5  | 0.180        | 45.00  |
| CUMENE HYDROPEROXIDE           |                 | 80-15-9     | 0.020        | 5.00   |
| BISPHENOL A FUMARATE RESIN     |                 | 39382-25-7  | 0.180        | 45.00  |
| SACCHARIN                      |                 | 81-07-2     | 0.020        | 5.00   |
| CONNECTORS                     |                 |             | 7304.000     | 100.00 |
| Stainless Steel                | Housing Barrel  | 12597-68-1  | 6636.414     | 90.86  |
| Contact Socket                 | Center Contact  |             | 149.002      | 2.04   |
| Beryllium                      | Center Contact  | 7440-41-7   | Varies       | Varies |
| Copper                         | Center Contact  | 7440-50-8   | Varies       | Varies |
| Plated Gold C17300             | Center Contact  | 7440-57-5   | Varies       | Varies |
| PTFE & PEI                     | Insulators      | 9002-84-0   | 518.584      | 7.10   |
| RESISTORS                      |                 |             | 2925.000     | 100.00 |
| ALUMINA - CERAMIC              |                 | 1344-28-1   | 2492.068     | 85.20  |
| PALLADIUM                      | INNER ELECTRODE | 7440-05-3   | 1.286        | 0.04   |
| SILVER                         | INNER ELECTRODE | 7440-22-4   | 79.557       | 2.72   |
| RUTHENIUM DIOXIDE              | RESISTIVE FILM  | 12036-10-1  | 9.066        | 0.31   |
| SILICON DIOXIDE                |                 | 7631-86-9   | 93.949       | 3.21   |
| MAGNESIUM OXIDE                |                 | 1309-48-4   | 20.766       | 0.71   |
| LEAD OXIDE - EXEMPT            |                 | 1317-36-8   | 21.496       | 0.73   |
| BORON OXIDE                    |                 | 1303-86-2   | 7.956        | 0.27   |
| CHROMIUM                       |                 | 7440-47-3   | 0.438        | 0.01   |
| EPOXY RESIN - 3                |                 | 129915-35-1 | 26.936       | 0.92   |
| COPPER OXIDE                   |                 | 1317-38-0   | 3.507        | 0.12   |
| CHROME (III) OXIDE             |                 | 1308-38-9   | 7.194        | 0.25   |
| MANGANESE DIOXIDE              |                 | 1313-13-9   | 1.197        | 0.04   |
| TITANIUM DIOXIDE               |                 | 13463-67-7  | 0.992        | 0.03   |
| NICKEL                         | BARRIER         | 7440-02-0   | 85.964       | 2.94   |
| TIN-100                        | PLATING         | 7440-31-5   | 72.597       | 2.48   |