

Declaration of Hazardous Substances

The RoHS EU directive bans the substances listed in Table 1. None of these substances are present in RoHS/Lead Free compliant Z-Communications, Inc. (ZCOMM) products. A RoHS compliant product is determined by the addition of the suffix, “-LF” after the standard part number, ex: “V585ME06-LF”. Please contact Sales at sales@zcomm.com if your part number does not yet exhibit the “-LF” suffix.

Table 1. RoHS banned substances

| # | Chemical Name | CAS No. | Application Example |
|---|---------------------------------------------|----------------|----------------------------------------------------------------------------------------------------------------------------|
| 1 | PBB, PBDE; specified bromic fire retardants | 1163-19-5 etc. | Flame retardant |
| 2 | Mercury & mercury compounds | 7439-97-6 etc. | Battery, Measuring instrument, Metal alloy, Catalyst, Illuminating lamp |
| 3 | Cadmium & cadmium compounds | 7440-43-9 etc. | Pigment, Battery, Metal alloy, Plating, Photograph, Polyvinyl chloride stabilizer, Liquid crystal, Compound semiconductor, |
| 4 | Lead and lead compounds | 7439-92-1 etc. | Metal alloy, Electronic part, Pigment, Rubber vulcanization accelerator Paint, Solder |
| 5 | Hexavalent chromium compounds | 1333-82-0 etc. | Corrosion prevention (chromate treatment), Oxidizing agent, Dye mordant, Pigment, Plating, Ink, Coloring agent |

In addition to the RoHS directive other regulatory entities have determined that certain substances are hazardous to the environment. Z-COMM recognizes these regulations. Table 2 lists other hazardous substances that are NOT present in any Z-COMM standard or RoHS compliant product.

Table 2. Other banned substances

| # | Chemical Name | CAS No. | Application Example |
|---|----------------------------------------------------------------------------------|-----------------|------------------------------------------------------------------------------------------------------------------------------|
| 1 | PCB; polychlorinated biphenyls | 1336-36-3 | Old style transformer, Insulating oil, Thermal catalyst, No-carbon paper |
| 2 | Asbestos; Chrysotile, Crocidolite, Amosite, Anthophyllite, Tremolite, Actinolite | 1332-21-4 etc. | Friction material, Gasket, Heat insulator material, Thermal insulator, Brake lining, Building materials, Refractory material |
| 3 | Chlorinated paraffine (C10-13, Cl \geq 50w t%) | 61788-76-9 etc. | Flame retardant |
| 4 | Ozone Depleting Chemical; 1,1,1trichloroethane | 71-55-6 | Cleaner, Solvent |
| 5 | Ozone Depleting Chemical; CFCs and halons | 75-69-4 etc. | Solvent, Cleaner, Propellant |
| 6 | Ozone Depleting Chemical; Carbon tetrachloride | 56-23-5 | Solvent |
| 7 | Dichloromethane; Methylene chloride | 75-09-2 | Solvent, Cleaner |
| 8 | Tetrachloroethylene; Perchloroethylene | 127-18-4 | Solvent, Cleaner |

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| 9 | Trichloroethylene; Trichlene | 79-01-6 | Solvent, Cleaner |
| 10 | Polychlorinated naphthalene (Cl _x , x>=3) ; Trichloronaphthalene, Tetrachloronaphthalene, etc | 70776-03-3 etc. | Plasticizer, Machine oil |
| 11 | Bis(tri-n-butyltin)oxide | 56-35-9 | Pigment, Paint additive, Insecticide, Antiseptics, Plasticizer, Polyvinyl chloride stabilizer, Various additives |
| 12 | Organo tin compounds (Tributyltins, Triphenyltins) | 1461-23-0 etc. | |
| 13 | PVC; polyvinylchloride; polyvinylchloride; polyvinylchloride blends; vinylchloride polymer | 9002-86-2 | Synthetic resin material |
| 14 | Ozone Depleting Chemical; HCFCs | 75-43-4 etc. | Solvent, Cleaner |
| 15 | Azo compound; Azo dye, pigment (coloring) | 92-67-1 etc. | Liquid crystal material, High-tech material, Dyestuff |
| 16 | Nickel | 7440-02-0 | The purpose of the part which can touch skin. Plating process, Metal alloy material, Alumite coloring, Pigment, Paint, Battery, Catalyst |
| 17 | Nickel compounds | 1313-99-1 etc. | |