



Material Content Data Sheet

| Umbrella Spec | EconoPACK™ + ; D - series with TIM | | | | | | | | |
|--|------------------------------------|----------------------------|----------------------------------|------------------------------|----------------|---------------|----------------|---|---|
| Date | 2013-12-10 | | | RoHS compliant | | Yes | | | |
| Revision | 3.0 | | | | | | | | |
| Construction element | Material group | Materials | CAS-Nr. if applicable | Average mass [%]* | Sum [%] | Traces | Comment | | |
| chip | inorganic material | silicon | 7440-21-3 | 0,1 | 0,1 | | | | |
| Base plate and substrate including metallisation | non noble metal | copper | 7440-50-8 | 64,0 | 68,9 | | | | |
| | inorganic material | aluminium oxid | 1344-28-1 | 1,7 | | | | | |
| | non noble metal | tin | 7440-31-5 | 3,0 | | | | | |
| | noble metal | silver | 7440-22-4 | 0,1 | | | | | |
| | non noble metal | nickel | 7440-02-0 | 0,1 | | | | | |
| | non noble metal | magnesium | 7439-95-4 | | | | X | | |
| wire | non noble metal | aluminium | 7429-90-5 | 1,6 | 1,6 | | | | |
| encapsulation | polymers | silicone gel | | 8,2 | 8,2 | | | | |
| housing | polymers | PBT | | 7,7 | 13,5 | | | | |
| | inorganic material | antimonytrioxide | 1309-64-4 | 0,8 | | | | | |
| | plastics | brominated resin | | 0,6 | | | | | |
| | plastics | chlorinated resin | | 0,4 | | | | | |
| | inorganic material | silicondioxide / glasfiber | | 4,0 | | | | | |
| lead, finish and plating | non noble metal | copper | 7440-50-8 | 3,5 | 7,5 | | | | |
| | ferrous metal | steel | | 4,0 | | | | | |
| | non noble metal | cobalt | 7440-48-4 | | | | X | | |
| | non noble metal | zinc | 7440-66-6 | | | | X | | |
| | non noble metal | aluminium | 7429-90-5 | | | | X | | |
| | non noble metal | tin | 7440-31-5 | | | | X | | |
| | noble metal | silver | 7440-22-4 | | | | X | | |
| | non noble metal | nickel | 7440-02-0 | | | | X | | |
| | TIM | non noble metal | aluminium | 7429-90-5 | | 0,1 | 0,1 | | |
| | | non noble metal | zinc oxid | 1314-13-2 | | | | | X |
| polymers | | silicon | 7440-21-3 | | | X | | | |
| polymers | | hydrocarbon co-oligomer | | | | X | | | |
| polymers | | hydrocarbon Waxes | | | | X | | | |
| non noble metal | | titanium | 61417-49-0 | | | X | | | |
| smd (including thermistors, resistors and shunts) | inorganic material | lead oxide | 1317-36-8 | 0,02 | 0,02 | | RoHS compliant | | |
| | non noble metal | copper | 7440-50-8 | | | | | X | |
| | non noble metal | tin | 7440-31-5 | | | | | X | |
| | noble metal | silver | 7440-22-4 | | | | | X | |
| deviation | <25% | | | Sum in total | 100,00 | | | | |

| | |
|-------------------------|--------------|
| Weight range of product | 927 g |
| Fluctuation margin | <25% |

*) related to component weight

**) Weight of particular product, see technical product information

Important Remarks:

- 1) This document provides full declaration of all materials present in Infineon products above a threshold of 0,1 % b.w. (1000 ppm).
- 2) Trace concentrations (i.e. < 0,1 % b.w) present in products are marked with an "X" as far as they represent substances-of-concern.
A list of substances-of-concern can be found at <http://www.infineon.com/soc>.
- 3) All statements are based on our present knowledge and are subject to change at any time due to technical requirements and development.
- 4) Infineon products are not classified as "hazardous substances" according to the definition in the EU Directive 67/548/EC and do therefore not require Material Safety Data Sheets.

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