

Environmental declaration

for TRIDONIC.ATCO LEDs

		Yes	No	No information	Not relevant for this product	(See) comment
Product						
1.	Plastic components in the product					
1.1	Is PVC used in cables and electrical conductors? (1)	x				
1.2	Does any other part of the product contain PVC? (1)		x			
1.3	Have plastic flame retardants containing PBB or PBDE been used in components in the product (2)		x			
1.4	Do the plastic components contain any of the following additives?					
1.4.1	Lead (incl. compounds) (3, 4, 5)		x			
1.4.2	Phthalates (3, 4)		x			
1.4.3	Chlorated paraffins (3, 4)		x			
1.4.4	Organic-tin compounds (3)		x			
1.5	Are environmentally hazardous metallic pigments used in the plastics? (3, 4, 5)		x			X1
1.6	Has the titanium oxide used as a pigment in plastic components been made by any method other than the one specified in the EU Commission Directive 92/112/EEG? (6)		x			
2.	Electronics and soldering					
2.1	Are the following environmentally hazardous substances used in the electronics and soldering?					
2.1.1	Arsenic (incl. compounds) (3, 4)	x				Trace elements in red and amber chips
2.1.2	Lead incl. compounds) (3, 4, 5)		x			
2.1.3	Cadmium (incl. compounds) (3, 4, 5)		x			
2.1.4	PCB (Polychlorinated biphenyls) (4)		x			
2.1.5	PCT (Polychlorinated terphenyls) (4)		x			
2.1.6	Silver compounds (4)	X				
2.1.7	PBB or PBDE		x			
3.	Metallic components in the product					
3.1	Are the following environmentally hazardous substances found in the product's metal components?					
3.1.1	Arsenic (incl. compounds) (3, 4)		x			
3.1.2	Lead incl. compounds) (3, 4, 5)		x			
3.1.3	Cadmium (incl. compounds) (3, 4, 5)		x			
3.1.4	Chromium (incl. compounds)	X				Traces in surface metallization of red and amber chips
3.1.5	Mercury (incl. compounds)		x			
4.	Other components					
4.1	Does the product contain glass components with lead additives? (2)		x			
4.2	Does the product contain any wood components made from tropical rain forests? (7)		x			
4.2	Does the product contain acid-curing silicone?		x			
5.	Paint / Varnish					
5.1	Are there any powder coated metal surfaces in the product?		x			
5.2	Are there any solvent-based painted metal surfaces in the product?	X				

		Yes	No	No information	Not relevant for this product	See comment
5.3	Are there any chemical products in paints/varnishes which are classed as environmentally hazardous? (8)	x				X2
5.4	Are environmentally hazardous metallic pigments used in paint/varnish? (3, 4, 5)		x			X1
5.5	Do metallic paints contain additives with the following substances?					
5.5.1	Halogenated organic binders		x			
5.5.2	Phthalates		x			
6. Solvents						
6.1	Are aromatic hydrocarbons included in the solvents used in the production of the product or packaging? (5)		x			X3
6.2	Are the substance groups (chlorofluorocarbonates / fluoroarbonates) used in the production of the product or packaging?		x			
6.3	Are chlorated solvents used in the production of the product or packaging?		x			X5
6.4	Are cyanides used in surface treatment of metal components?		x			
6.5	Are there any metal surfaces which are degreased with chlorated organic solvents?		x			
6.6	Is only water-based de-greasing of metal surfaces used, or no degreasing at all?		x			
6.7	Are nonylphenoethoxylates (environmentally hazardous tensides) used in degreasing metal surfaces?		x			
6.8	Do any of the metal paints contain more than 5 percent by weight of organic solvents?		x			
6.9	Is the VOC content (Volatile Organic Compounds) in the paints/varnishes used more than 25 percent by weight? (8)		x			
6.10	Are aromatic hydrocarbons used in the paints/varnishes? (5)		x			X3
6.11	Are water or environmentally acceptable solvents used in in the paints/varnishes? (9)		x			X4
7. Other surface treatment of metals						
7.1	Report the methods for surface treating metal components (zinc plating, chrome plating, etc.):	Gold plating, tin plating, ENTEC-coating				
8. Packaging (refers to individual packages)						
8.1	The package contains the following pure (not compound) material:	Carton, Low Density Polyethylene, Pigments				
8.2	Is shock-absorbing plastic material used in the package?	x				
8.3	Are ozone-destroying compounds used in making the shock-absorbing plastic material in the package?		x			
8.4	Are compound materials used in the packages?		x			
8.4.1	The packages consist of the following compound materials:					
8.5	Are all plastic materials used in the packages marked in accordance with the DIN 6120 standard specification to facilitate recycling?		x			
9. Recycling						
9.1	Is the company a member of the Electrical Recycling Organisation?		x			
9.2	Is the company a member of the REPA register?		x			
9.3	Has the product been prepared for disassembly by making all materials possible to separate?	x				
9.4	Are all larger plastic components (more than 100 g) marked in accordance with the ISO 11 469 standard specification?	x				

Comments:**X1**

Pigments Environmentally hazardous pigments are the following:

- Arsenic (including compounds) (3, 4)
- Lead (including compounds) (3, 4, 5)
- Cyanides (including compounds) (5)
- Cadmium (including compounds) (3, 4, 5)
- Copper (including compounds) (4)
- Chromium (including compounds) (4)
- Mercury (including compounds) (3, 4, 5)
- Nickel (including compounds) (5)

X2

"Environmentally hazardous chemical products" are the following:

- Pure substances marked by one of the following risk classifications:
R52, R53, R54, R55, R56, R57, R58, R59
- Preparations where the percentage of pure substances marked by one of the following risk classifications exceeds 2% by weight:
R52, R53, R54, R55, R56, R57, R58, R59

X3

Aromatic hydrocarbons:

- Benzene (5)
- Toluene (Methylbenzene) (5)
- Xylene (Dimethylbenzene) (5)

X4

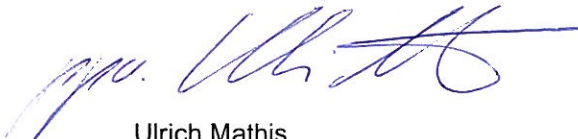
Environmentally acceptable solvents are as follows (as ref. 9):

- Water
- Ethanol (not denatured with phthalals)
- i-Propanol
- Propylene glycol
- n-Paraffins
- Glycerol (= alcohols with more than 4 carbon atoms)
- Acetone
- Isopropyl laurate
- Isopropyl palmitate
- Isopropyl myristat
- Methyl pyrrolidon
- Gamma-Butyrolactone
- Ethylacetate

X5

- Chlorated solvents:
- Hexachlorbutadiene
- Methylene chloride
- Tetrachlormethane
- 1, 2, 4-Trichlorbenzene
- 1, 1, 1-Trichlorethane
- Trichlorethylene
- Trichlormethane

Dornbirn, 04.06.2009



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