

## Environmental facts

Company: Frico

Product: IR3000-4500-6000

Produced by E.L. Electrical Material Suppliers' Association. The material is based on NUTEK's project "Advice for Purchasers"

		Yes	No	No in-formation	Not relevant for this product	See comment
<b>1.</b>	<b>Plastic parts in products</b>					
1.1	Is there PVC in the cables and electrical wires (1)	X				
1.2	Does any other part of the product contain PVC? (1)		X			
1.3	Do the plastic parts in the product contain flame retardants with organically bound chlorine or bromine? (2)		X			
1.4	Do the plastic parts in the product contain any of the following additives?					
	Lead (including compounds) (3, 4, 5)		X			
	Phtalates (3, 4)		X			
	Chlorinated paraffins (3, 4)		X			
	Organic tin compounds (3)		X			
1.5	Are environmentally hazardous metal pigments used in the plastic? (3, 4, 5)		X			X1
1.6	Is the titanium dioxide used as a pigment in the plastic parts manufactured according to another method than that stated in EU council's directive 92/112/EEG? (6)		X			
<b>2.</b>	<b>Electronics and solder</b>					
2.1	Do the electronics and solder contain any of the following environmentally hazardous substances?					
	Arsenic (including compounds) (3, 4)		X			
	Lead (including compounds) (3, 4, 5)		X			
	Cadmium (including compounds) (3, 4, 5)		X			
	PCB (Polychlorinated compounds) (4)		X			
	PCT (Polychlorinated terphenyls) (4)		X			
	Silver compounds (4)		X			
		Yes	No	No In-formation	Not relevant for this product	See comments

<b>3.</b>	<b>Metal parts in the product</b>					
3.1	Do the metal parts in the product contain any of following environmentally hazardous substances?					
	Arsenic (including compounds) (3, 4)		X			
	Lead (including compounds) (3, 4, 5)		X			
	Cadmium (including compounds) (3, 4, 5)		X			
<b>4.</b>	<b>Other parts</b>					
4.1	Does the product contain parts made of glass with lead additives? (2)		X			
4.2	Does the product contain parts made of wood from tropical rain forests? (7)		X			
<b>5.</b>	<b>Paint/varnish</b>					
5.1	Are there chemical products in the paint/varnish used which are classified as environmentally hazardous? (8)		X			X2
5.2	Are there any environmentally hazardous metal pigments in the paint/varnish? (3, 4, 5)		X			X1
<b>6.</b>	<b>Solvents in paint/varnish</b>					
6.1	Are solvent-based paints/varnishes used on any of the parts of the product?		X			
6.2	Is the level of VOC's (volatile organic compounds) in the paint/varnish used higher than 25% by weight? (8)		X			
6.3	Does the paint/varnish contain aromatic hydrocarbons? (5)		X			X3
6.4	Are water or environmentally acceptable solvents used in the paint/varnish? (9)		X			X4
<b>7.</b>	<b>Other surface treatment of metal</b>					
7.1	State methods for surface treatment of metal parts (galvanizing, chromium plating etc.)					

		Yes	No	No information	Not relevant for this product	See comment
<b>8.</b>	<b>Packaging</b>					

8.1	Does the packaging consist of any of the following acceptable materials (materials are listed in order where I is the best alternative)?					
I	Unbleached paper/carton from recycled fibre	X				
II	Polyethylene or Polypropylene plastic from recycled material.		X			
III	One of the materials from groups I or II is manufactured from new raw materials.	X				
8.1.1	Packaging consists of the following pure (not composite) materials not included above:					
8.1.2	Packaging consists of the following composite materials:					
8.2	Is all plastic material in the packaging marked according to standard specifications DIN 54 840 and/or ISO 11469 to simplify recycling?		X			
8.3	Is there PVC or other halogen-containing plastic in the packaging? (2)		X			
8.4	Is the company a member of the REPA register?	X				

## B. Manufacturing

		Yes, used in production	No, not used in production	No information	Not relevant for this product	See comments
<b>9.</b>	<b>Solvents</b>					

9.1	Are aromatic hydrocarbons used in solvents in the production of the product or packaging? (5)		X			X3
9.2	Are any of the following chlorflouorocarbons/ flouorocarbons used in the production of the product or packaging?		X			
	CFC (10)		X			
	HCFC (10)		X			
9.3	Are chlorinated solvents used in the production of the product or packaging?		X			X5

Comments:

X1

Pigment

The following are classified as environmentally hazardous pigments:

Arsenic (including compounds) (3, 4)

Lead (including compounds) (3, 4, 5)

Cyanides (including compounds) (3, 4, 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

The following are classified as environmentally hazardous chemical products:

Pure substances marked with any of the following risk categories:

R52, R53, R54, R55, R56, R57, R58, R59

Preparations containing pure substances marked with any of the following risk categories at levels greater than 2% by weight:

R52, R53, R54, R55, R56, R57, R58, R59

X3

Aromatic hydrocarbons:

Benzene (5)

Toluene (methylbenzene) (5)

Xylene (dimethylbenzene) (5)

X4

The following solvents are classified as environmentally acceptable (according to ref 9):

Water

Ethanol (not denaturated with phthalates)

i-Propanol

Propylene glycol

n-Paraffins

Glycerol (=alcohols with more than four C atoms)

Acetone

Isopropylaurate

Isopropylpalmitate

Isopropylmyristate

Methylpyrrolidone

Gamma-Butyrolactone

Ethyl acetate

X5

Chlorinated solvents:

Hexachlorobutadiene

Methylene chloride

Tetrachloromethane

1, 2, 4-Trichlorobenzene

1, 1, 1-Trichloroethane

Trichloroethylene

Trichloroethane

## References

- Greenpeace's list of councils which are positive towards stopping their use of PVC.

Greenpeace

Box 15164

104 65 STOCKHOLM

Tel: +46 8 702 70 70

- "Environmental aspects for procurement of fittings". Environmental Administration, Gothenburg Municipal Council, Memo 15 June 1994.

Miljöförvaltningen

Göteborgs Kommun

Box 360  
401 25 GÖTEBORG  
Tel: +46 31 61 26 10

3. Chemicals Inspectorate, Limitations 10/90, the so-called list of 13.
4. Chemicals Inspectorate, Environmentally hazardous list and scientific documentation 10/89, the so-called list of 40.
5. US Environmental Protection Agency: Industrial Toxics project (1990). List of high priority environmentally hazardous chemicals for which emission should be reduced by at least 50 per cent by the end of 1996.
6. Council directive 92/112/EEG of December 1992 on *Actions to reduce and ultimately eliminate pollution from waste from the titanium dioxide industry*.
7. Good Wood Guide, Friends of the earth, UK 1987.

Jordens Vänner  
Fjällgatan 23A  
116 28 STOCKHOLM  
Tel: +46 8 702 20 17

8. "Marque NF-Environment aux peintures, vernis et produits connexes", Third revised version 10 June 1994 AFNOR, France.

Association Française de Normalisation  
Tour Europé  
Cedex 7  
92049 Paris La Défense  
France  
Tel: +33(1) 42 91 55 55

Fax: +33(1) 42 91 55 56

9. Assessment and comparisons of solvents in household chemical-technical products- Basis for the Swedish National Association for Environmental Protection's work within the project area Buy Environmentally Friendly. Anders Östman and Ulf Karlström, March 1993 (list revised 1993).

Naturskyddsföreningen  
Box 7005  
402 31 GÖTEBORG  
Tel: +46 31 711 64 50

Fax: +46 31 711 64 30

10. Montreal protocol 1987 (including London addition 1990 and Copenhagen addition 1992) concerning countries' actions for stopping the use of ozone-degrading agents and the Statute on CFC and Halones, etc. SFS 1988.716.