

Material Information Card Enamelled Winding Wire

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This information sheet is not a Safety Data Sheet, since our wires are only articles according REACH. They are neither Substances nor Components, and require no SDS. This information sheet is intended to give guidance to the user on any potential health, safety and environmental question associated with the use of this material. The information has been standardised within all European Manufacturers, members of EWWG: Europacable Winding Wire Group

We declare that the Material conforms to the Environmental Specifications, as listed in the Ecodeclaration below

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ENVIRONMENTAL MANAGEMENT SYSTEMS	DIN EN ISO14001 Certificate No: 004273 UM dated 2014-05-02
MATERIAL	MAGNESOL U-155, MAGNESOL UN-155, MAGNESOL U-180, MAGNESOL UN-180
MATERIAL DESIGNATION	Polyurethane enamelled wire with or without polyamide top coat
IEC STANDARDS	IEC 60317-20, -21, -51, -55
PURPOSE	For use only as winding wires for electrical applications
CHEMICAL COMPOSITION	The film is a modified Polyurethane (with polyamide top coat) on a copper conductor. The surface is coated with an extremely thin layer of paraffin wax, beeswax or ester wax. Substrate: electrolytic copper 99.95 % purity. The material does not contain lead, mercury, cadmium, hexavalent chromium, polybromated biphenyl (PBB), polybrominated diphenylether (PBDE), Hexabromocyclododecan (HBCCD), Di(2-ethylhexyl)phthalat (DEHP), Butylbenzylphthalat (BBP), Dibutylphthalat (DBP) and Diisobutylphthalat (DIBP) according to European Union Directive 2011/65/EU (RoHS II) and pentaBDE, octaBDE according to European Union Directive 2003/11/EC.
WEIGHTS AND DIMENSIONS	Double coat wire: wire with base coat insulation plus overcoat insulation. Substrate: from 95 to 99.3 % in weight (average 97.5 %) Base coat insulation: from 0.6 to 4 % in weight (average 2.0 %) Overcoat insulation: from 0.1 to 1 % in weight (average 0.5 %)
PHYSICAL PROPERTIES	Solid material - stable up to its recommended maximum operating temperature of 150°C, for a minimum life of 20,000 hours. (180 °C for MAGNESOL U-180 and MAGNESOL UN-180) Resistivity at 20 °C: Copper 0.0172413 Ωmm²/m, aluminum 0.027898 Ωmm²/m
HEALTH HAZARDS	There are no known health hazards associated with this material when used for its specified purpose. If the enamel film is burnt or soldered, degradation products may be evolved which may require local exhaust ventilation.
FIRE PRECAUTIONS	In normal conditions of storage this material will not initiate nor support combustion. If this material is involved in a fire, the plastic spools, pallets and other packaging are combustible and may give off toxic fumes.
HANDLING USE / PRECAUTIONS	As this material is used in other manufacturing processes it is important that any safety devices on the winding machines are used in accordance with the manufacturers' instructions. Particular attention should be paid to subsequent operations such as soldering and bonding, local exhaust ventilation should be used if required. Care should be taken to prevent cuts from any sharp edges on the wire. When de-reeling, care should be taken to ensure that any loose ends from the end of the reel or from a wire break do not fly out and cause laceration injury. Care should also be taken to ensure that trapped wires do not cause the reel to be pulled up out of position. On site risk assessments should be carried out to determine the safe way of handling reels or packages containing wire.



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OCUPATIONAL EXPOSURE STANDARDS Only for Polyurethane coatings: Isocyanate will be evolved during burning or soldering an is a potential respiratory sensitizer. For the exposure limits please refer to the applicable values of each Country. No relevant standards for all the other coatings. TRANSPORTATION / STORAGE CONDITION TRANSPORTATION / Enamelled Winding Wire is not subject to any specific provisions within the European Community. Care should however be taken to ensure that all loads are secured and unable to move during transportation. The storage temperature should not exceed 60 °C. High humidity, condensation water or aggressive agents should be avoided. Recommended conditions are 25 °C at 60 % humidity and no direct solar radiation. Under optimum storage condition the minimum shelf life for are 3 years. These are standard values, after exceeding the time limit the properties of the wire have to be tested before use. DISPOSAL PRECAUTIONS a) Winding wires are used with other materials to form a part of many different electrical equipment/apparatus. As far as the Directive on Electrical and Electronic Waste (WEEE 2002/96/CE) is concerned, it is the End of Life of the Electrical and Electronic Waste (WEEE 2002/96/CE) is concerned, it is the End of Life of the equipmen / apparatus. b) Winding wires are not equipment, according the Directive WEEE 2002/96. The winding wire producers do not have a direct influence on the life of the equipmen / apparatus. c) Only for information the winding wires producers suggest to the owner of the enamelled wires this environmental-friendly way of recycling the enamelled copper wires coming from production waste, customer production waste or end of life of electric-electronic apparatus: 1) To send the metal waste to the metal refineny in order to recover metal. 3) To send the metal waste to the metal refineny in order to recover metal. 17.04.02 Aluminum The Eurocode concerning enamelled wires are: 16.01.18 non-ferrous metal 15.01.01 Paper and cardboard packagin
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COMPANY ADDRESS Essex Germany GmbH Engter Str. 34 Essex Germany GmbH Korbacher Str. 6
Engter Str. 34 Korbacher Str. 6 49565 Bramsche 34454 Bad Arolsen Germany Germany This information is presented in good faith and is based on knowledge of the materials in January 2017.