Safety Data Sheet

Section 1. Chemical Product Identification

Product Use

Electrical Wire and Cable

Other Designations

Copper wire coated with Plasticized Polyvinyl Chloride (PVC).

Relevant identified uses of the substance or mixture and uses advised against

Not applicable.

Details of the supplier of the safety data sheet

Premier Farnell
150 Armley Road
Leeds LS12 2QQ
Tel. : +44 (0) 870 129 8608

Emergency telephone number

+44 (0) 870 202530

Section 2. Physical Data and Chemical Properties Copper

Molecular weight	: 63.54
Boiling point	: 2324°C
Specific Gravity	: 8.9
Chemical Symbol	: Cu
Melting Point	: 1083°C
Vapor Pressure	: N/A
Plasticized Polyvinyl Chloride (PVC)	
Form	: Solid
Specific Gravity	: 1.22 - 1.45
Melting Point	: Not Determined
Evaporation Rate	: N/A
Odour	: Very Faint

Section 3. Hazardous Ingredients of Materials

Ingredients	% w/w	CAS No.	NIOSH, REL TWA mg/m^3	Toxicity LD50 mg/kg	OSHA, PEL TWA mg/m^3	ACGIH, TLV TWA mg /m^3	Prop 65[7] micro gram/ day
Copper (Cu)	99.99	7440-50-8	-	-	1.0	1.0 (dusts & mists) 0.2 (fumes)	-
Antimony trioxide[1-6]	0-5	1309-64-4	-	>34,000 (rat, oral)	0.5	0.5	-
Calcium Carbonate	0-5	1317-65-3	10 (total dust)	>34,600 (rat, oral)	15 (total dust)	-	-
Diisononyl phthalate (DINP)[6]	0-40	28553-12-0	-	>10,000 (rat, oral)	-	-	-
Calcined Kaolin Clay	0-10	92704-41-1	-	-	15 (total dust) 3 (respirable) 10 (inhalable) 5 (respirable)		-

Ingredients	% w/w	CAS No.	NIOSH, REL TWA mg/m^3	Toxicity LD50 mg/kg	OSHA, PEL TWA mg/m^3	ACGIH, TLV TWA mg /m^3	Prop 65[7] micro gram/ day
Vinyl Chloride	<1 ppm	75-01-4	5 ppm	500(rat, oral)	1 ppm	-	3.0 NSRL[7,8]
Monomer[1-6]	(<1 micro gram/ gram)				0.5 ppm (action level) 5 ppm (STEL)		

TWA: time-weighted average.
TLV: threshold limit value.
REL: recommended exposure limit.
PEL: permissible exposure limits.
STEL: short term exposure limit.
ACGIH: American Conference of Governmental Industrial Hygienists (US).
NIOSH: National Institute of Occupational Safety and Health (US).
OSHA: Occupational Safety and Health Administration (US)
Copper is shown as a percentage of the copper conductors only; all other ingredients are shown as a percentage of the total of insulation and jacket coating materials

Legislative foot notes:

1.0 Ingredient listed on SARA Section 313 list of toxic chemicals.
2.0 Ingredient listed on the Pennsylvania Environmental Hazardous Substance List.
3.0 Ingredient listed on the Massachusetts Right to Know List.
4.0 Ingredient listed on the Ingredient Disclosure List of the Canadian Workplace Hazardous Materials information System (WHMIS).
5.0 Ingredient listed on the New Jersey Right to Know Hazardous Substance List.
6.0 California Proposition 65: WARNING This substance is on the List of Chemicals known to the State to cause Cancer or Reproductive Toxicity.
7.0 Proposition 65: No Significant Risk Level (NSRL) for Carcinogens and Maximum Allowable Dose Levels (MADL) for Chemicals Causing

Reproductive Toxicity

8.0 To exceed the exposure limit the ingestion rate for PVC compound would be greater than 3 grams per day.
9.0 Jar products do not contain any of Europe's "substances of very high concern" (SVHC).

Section 4. Fire and Explosion Data

Plasticized Polyvinyl Chloride (PVC)

Flash Point (Test Method)	: 182°C (Cleveland open cup)
Auto Ignition Temperature	: NA
Flammable limits in air	: N/A
Product of combustion	: The most important are carbon dioxide, carbon monoxide and hydrogen chloride. Traces of aromatic and aliphatic hydrocarbons may be found. Fumes are considered toxic. Copper if heated to a very high temperature may give off copper fumes.
Fire Fighting Media and instructions	: Use water, dry powder, carbon dioxide or foam. Wear protective clothing and self contained respirator.

Section 5. Stability And Reactivity Data

Stability	: Stable
Self Polymerize	: No

Section 6. Hazards Identification

Plasticized Polyvinyl Chloride (PVC)

Potential Acute Health risk	: Over exposure to dangerous ingredients (listed in Section 3) is improbable as they are bound in the matrix of the polymer. During thermal processing, volatile ingredients such as plasticizers may evaporate. These substance release odors, which under normal processing conditions, are considerably lower to the threshold limit values. However they may cause a slight irritation of the eyes and respiratory tract if ventilation is insufficient.
Potential Chronic Health effects	: No known chronic effect. Over exposure is improbable because the ingredients are bound in the matrix of the polymer.

Copper

Inhalation	: Copper metal dust and fumes may be irritating to the respiratory tract. In user operations where copper fumes are generated, inhalation of the fumes can result in symptoms of metal fume fever such as chills, fever and sweating.
Skin Contact	: A few instances of allergic skin rashes have been reported in workers exposed to metallic copper.
Ingestion	: The lowest observed toxic oral dose of copper is 120 micro/kg in humans. This dose caused gastrointestinal effects. Dust and mist may irritate nose, throat.
Pre-existing Conditions	: Wilson's disease can occur in certain individuals with a rare, inherited metabolic disorder characterized by retention of excessive amount of copper in the liver, brain, kidneys and corneas. These deposits eventually lead to tissue necrosis and fibrosis, causing a variety of clinical effects, especially liver (i.e. hepatic) disease and neurologic changes. Wilson's disease is progressive and, if left untreated, leads to fatal liver (i.e. hepatic) failure.

Section 7. Toxicological Properties

Plasticized Polyvinyl Chloride (PVC)

Primary routes of entry	: Inhalation of smoke and fumes.
Symptoms and effects of overexposure	: Inhalation of smoke and fumes cause headaches.

Section 8. Handling and Storage

Precautions	: Under normal usage coated wire and cable is inert. During thermal processing avoid inhaling vapors, fumes or dust. Avoid contact with eyes and skin contact with molten product. Always wash thoroughly before eating, drinking or smoking, as well as after work shift.
Storage	: Keep away from heat and in a dry location.

Section 9. Exposure Controls /Personal Protection

Engineering Controls	: Local exhaust ventilation sufficient to control vapors and odors during the heating process.
Personal Protection	:Safety glasses and work clothes. In case of insufficient ventilation, wear an appropriate MSHA/NIOSH respirator.

Section 10. First Aid Measures

Skin Contact	: Not a skin irritant. Skin Contact with molten plastic: Cool rapidly with cold water. Obtain medical attention for burn.
Eye Contact	: Seek medical attention if a splash of molten plastic has occurred.
Inhalation	: Stop exposure if persistent discomfort occurs. (Irritation of nose, eyes and throat).
Ingestion	: No particular treatment is needed.

Section 11. Disposal Considerations

Waste disposal: Recycle to process, if possible. Consult your local and regional authorities.

Section 12. Other Information

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