

## 1. Information about the goods and manufacturer

### Name of Goods

Heatshrink Tubing Normal Wall 2:1

### Description of Goods

Irradiated Polyolefin Normal Wall Heat Shrink Tubing

### Name of Manufacturer or Supplier of the goods

Premier Farnell plc

150 Armley Road, Leeds, LS12 2QQ

+44 (0) 8701 202530

### 1.4. Emergency telephone number

+44 1865 407333

## 2. Chemical Properties

Ingredient	Chemical Formula	Function	Percentage	CAS No.
Ethylene-vinyl acetate copolymer	$(C_2H_4)_n(C_4H_6O_2)_m$	Main Material	50%	24937-78-8
Magnesium hydroxide	$Mg(OH)_2$	Flame Retardant Material	35%	1309-42-8
Phosphorus	P	Flame Retardant Material	10%	7723-14-0
Pigment	Pigment	Colorant Material	5%	-
Printing Ink	-	Printing Ink	-	-

## 3. Hazard Information

### Key Hazards

Toxicological Effects on Health: After the tubes are ignited, the flame will self-extinguish in a short time. A little fume will give off and have slight harm on the respiratory passage of the human body.

Influence on Environment: It will cause air pollution when the tubes burn.

Physical and Chemical Hazards: Normally it is in tubular shape, and shrink at 70-125°C, which perhaps is harmful.

Special Hazards: When roasted or fumigated, the smoke given off will have impact on the eyes and respiratory system, and is harmful to the human body.

Main symptoms: Weep, sneeze, cough, etc. These symptoms can be relieved through breathing fresh air.

Hazards generated when burning: The tubing will burn for a short period of time after being ignited.

## 4. First-Aid Measures

### First-aid measures for exposing in different occasions:

Inhalation : During proper operation, there is no danger caused by inhalation.

Skin contact : No damage to skin in normal contact. As skin is easily scratched by the tubes, the operators are suggested to put on gloves in operation.

Eye contact : No harm.

Ingestion : Not edible

Key harmful effects : It will impact the respiratory System if you inhale smokes generated by the burning of the tubes.

Protective measures for the rescuers : Wear respiration protection equipment.

Suggestions to doctor : Those who have suffered severe damage in respiratory system should keep on inhaling fresh air to relieve the symptom.

## 5. Fire-fighting Measures

Suitable fire-extinguishing agent : Dry Powder Extinguisher should be used in order to put out the fire in a short time.

Special harms possibly incurred in fire-fighting : Small amount of smoke will give off when the tubes burn, which will impact the respiratory system of human body.

Special fire-fighting procedures : No

Special protective equipment for the fire-fighters : Normal fire-extinguishing equipment.

## 6. Emergency measures for leakage

Attentions need to be paid by individuals : No

Environmental notice : No

Cleaning Method : No

## 7. Operation and Storage

Operation : The tubes will shrink when heated by oven or heat gun.

Storage : Pack the tubes with cartons properly and place them at a shady place and at normal temperature.

## 8. Contact controls and personal protection

Contact controls : Not harmful

Personal protective measures : No

## 9. Physical and Chemical Properties

Properties	Test Method	Test result	
Physical Properties	Tensile strength /MPa	GB/T1040	≥10.4
	Elongation/%	GB/T1040	≥200
	Tensile strength after aging/MPa	UL 224: 158°C×168hr	≥7.3
	Elongation after aging/%	UL 224: 158°C×168hr	≥100
	Heat Resistance	UL 224: 250°C×4hr	No viscosity No Cracking
	Cold blend	UL 224: -30°C×1hr	No Cracking

Properties		Test Method	Test result	
Electrical Properties	Dielectric Strength(KV/mm)	GB/T1040	≥15	
	Dielectric Withstand	300V	UL 224	No breakdown at 1500V
		600V	UL 224	No breakdown at 2500V
	Volume resistance / Ω·cm	GB/T1410	≥1×10 <sup>14</sup>	
Chemical Properties	Anti Corrosion	UL 224 158°C×168hr	PASS	
	Copper stability	UL 224 158°C×168hr	PASS	
	Flammability	FMVSS302	PASS	

## 10. Stability and Reactivity of the goods

Stability	: irresolvable
Hazardous effects under special conditions	: If exposed to fire, the products will burn in a short time and give off smoke.
Conditions to be avoided	: The products will shrink under high temperature.
Substance to be avoided	: Fire
Hazardous decomposition product	: Smoke

## 11. Toxicological Information

Acute Toxicity	: No
Partial Effect	: No
Allergic Reactions	: No
Slow toxicity or long-term toxicity	: No
Special Effects	: No

## 12. Ecological Information

Possible effects on environment	: The products are irresolvable naturally and are not harmful to animals, plants and aquatic life.
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## 13. Waste Disposal

Trash disposal	: It is suggested that the waste be collected to waste-collection station for treatment.
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## 14. Transport Information

Regulations on international transportation	: No
U.N. code	: No
Regulations on Domestic transportation	: No
Special transportation method and notice	: Avoid distortion caused by extrusion and damage caused by edged tools.

## 15. Regulation Information

Applicable regulation	: UL224 (All Except Clear)
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# Safety Data Sheet

## 16: Other information

NA

| Part Number |
|-------------|-------------|-------------|-------------|-------------|-------------|
| 13650       | 13652       | 13689       | 13738       | 15052       | 15089       |
| 13633       | 13652GRY    | 13690       | 13739       | 15053       | 15090       |
| 13633GRY    | 13653       | 13691       | 13740       | 15054       | 15091       |
| 13634       | 13653GRY    | 13692       | 13741       | 15055       | 15092       |
| 13634GRY    | 13654       | 13693       | 13742       | 15056       | 15093       |
| 13635       | 13654GRY    | 13694       | 13745       | 15057       | 15094       |
| 13635GRY    | 13655       | 13695       | 13746       | 15058       | 15095       |
| 13636       | 13656       | 13696       | 13747       | 15059       | 15096       |
| 13636GRY    | 13657       | 13699       | 13748       | 15060       | 15097       |
| 13637       | 13658       | 13700       | 13749       | 15061       | 15098       |
| 13637GRY    | 13659       | 13701       | 13753       | 15062       | 15099       |
| 13638       | 13660       | 13702       | 13757       | 15063       | 15100       |
| 13638GRY    | 13661       | 13703       | 13761       | 15064       | 15101       |
| 13639       | 13662       | 13704       | 13765       | 15065       | 15102       |
| 13639GRY    | 13663       | 13705       | 13773       | 15066       | 15103       |
| 13640       | 13664       | 13707       | 13777       | 15067       | 15104       |
| 13640GRY    | 13665       | 13709       | 13781       | 15068       | 15105       |
| 13641       | 13666       | 13710       | 13785       | 15069       | 15106       |
| 13642       | 13667       | 13711       | 15034       | 15070       | 15107       |
| 13643       | 13668       | 13712       | 15035       | 15071       | 15108       |
| 13643GRY    | 13669       | 13713       | 15036       | 15072       | 15109       |
| 13644       | 13670       | 13714       | 15037       | 15073       | 15110       |
| 13644GRY    | 13671       | 13715       | 15038       | 15075       | 15111       |
| 13645       | 13672       | 13716       | 15039       | 15076       | 15112       |
| 13645GRY    | 13673       | 13717       | 15040       | 15077       | 15113       |
| 13646       | 13674       | 13721       | 15041       | 15078       | 15114       |
| 13646GRY    | 13676       | 13722       | 15042       | 15079       | 15115       |
| 13647       | 13677       | 13723       | 15043       | 15080       | 15116       |
| 13647GRY    | 13678       | 13724       | 15044       | 15081       | 15117       |
| 13648       | 13679       | 13725       | 15045       | 15082       | 15118       |
| 13648GRY    | 13680       | 13726       | 15046       | 15083       | 15119       |
| 13649       | 13681       | 13732       | 15047       | 15084       | 15120       |
| 13649GRY    | 13682       | 13733       | 15048       | 15085       | 15121       |
| 13650GRY    | 13683       | 13734       | 15049       | 15086       | 15122       |
| 13651       | 13686       | 13735       | 15050       | 15087       | 15123       |
| 13651GRY    | 13688       | 13736       | 15051       | 15088       | 15124       |

# Safety Data Sheet



Part Number
15125
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HS510-1.22M

Part Number
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HS511-1.22M
HS511-5M
HS512-1.22M
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HS514-1.22M
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HS515-1.22M
HS515-5M

Part Number
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HS518-5M
PP001845
PP001846
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Part Number
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