

1. Information about the goods and manufacturer:

Name of Goods: 125℃ Environment Friendly Thin Wall Flame-retardant Heat Shrink Tubing

(Part Number: 13633)

Description of Goods: Heatshrink Tubing Normal Wall 2:1 Black 1.60mm 100m

Name of Manufacturer or Supplier of the goods: Premier Farnell plc

150 Armley Road

Leeds LS12 2QQ

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2. Chemical Properties:

| Ingredient | Chemical Formula | Function | Percentag e | CAS No. |
|-----------------------------|-------------------------------------|---------------------|----------------|------------|
| Polyolefin | (CH ₂ CH ₂)n | Main Material | 50% | 9002-88-4 |
| Magnesium hydroxide | Mg(OH)₂ | Flame Retardants | 35% | 1309-42-8 |
| Brominated flame retardants | | Flame Retardants | 10% | |
| Pigment | Pigment | Colorant | 5% | 83524-75-8 |

3. Hazard Information

| | Toxicological Effects on Heath: 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. | | |
|----------------|---|--|--|
| Key Hazards | Influence on Environment: It will cause air pollution when the tubes burn. | | |
| Hazarus | Physical and Chemical Hazards: Normally it is in tubular shape, and shrink at 70-125 $^{\circ}\mathrm{C}$, 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.

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℃ ×168hr | ≥7.3 |
| | Elongation after aging/% | | UL 224: 158℃ ×168hr | ≥100 |
| | Heat Resistance | | UL 224: 250℃×4hr | No viscidity No Cracking |
| | Cold blend | | UL 224: -30℃×4hr | No Cracking |
| 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 ¹⁴ |
| Chemical Properties | Anti Corrosion | | UL 224 158℃×168hr | PASS |
| | Copper stability | | UL 224 158℃×168hr | PASS |
| | Flammability | | UL 224 | VW-1 |

10. Stability and Reactivity of the goods:

Hazardous decomposition product: Smoke

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

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.

13. Waste Disposal:

Trash disposal: It is suggested that he waste be collected to waste-collection station for treatment.

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

Part Number 13633

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