



Adding more to adhesive tape

# FLAME RETARDANT RANGE

Issue 1



Advance Tapes  
A UK leading manufacturer  
and supplier of high quality  
adhesive tapes





# PROFESSIONAL FLAME RETARDANT TAPES

Choose from a comprehensive range of products for indoor and outdoor applications that have been developed for professionals across various industries that are looking for a flame retardant tape to suit a purpose.

To make it easy to select the right tape for the job, we have consolidated all key technical product information and features into one easy-to-use brochure.

The products included in this brochure are a selection from our extensive range.

More info can be found on our website [www.advancetapes.com](http://www.advancetapes.com).

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## AT7 - PVC Electrical Tape

### Features

- Flame retardant and self-extinguishing
- Easy unwind and tear
- UV resistant
- Available in colour coding packs

### Applications

- Colour coding & general protection and insulation of electrical components and wiring.
- Cable management and bundling.
- Masking off aircraft landing gear when cadmium plating.
- Masking and protection of aircraft portholes.

### Adhesive type

Cross-linked solvent based rubber-resin

### Technical

Thickness: 0.13 mm  
 Breaking load: 26 N/cm  
 Elongation: 180%  
 Adhesion to Steel: 2.4 N/cm  
 Adhesion to Self: 2.1 N/cm  
 Service Temperature: -5°C to +70°C  
 Breakdown voltage: 8kV  
 RoHS Compliant: Yes

### Specification

Conforms to BS EN 60454/Type 2



### Standard colours



## AT10 - PVC Heavy Duty Pipewrap Tape

### Features

- Flame retardant and self-extinguishing
- Conformable
- Water and UV resistant
- Abrasion resistant

### Applications

- Corrosion and abrasion protection for pipework above or under ground

### Adhesive type

Cross-linked solvent based rubber-resin

### Technical

Thickness: 0.25 mm  
 Breaking Load: 44 N/cm  
 Elongation: 220%  
 Adhesion to Steel: 3.3 N/cm  
 Adhesion to Self: 3.0 N/cm  
 Service Temperature: -5°C to +80°C  
 Breakdown Voltage: 10 kV RoHS  
 Compliant: Yes

### Specification

Conforms to BS EN 60454-3-1 Type 2

### Standard colour



## AT20 - PVC Extra Heavy Duty Pipewrap Tape

### Features

- Flame retardant and self-extinguishing
- Very high abrasion resistance
- UV & water resistant

### Applications

- Corrosion and abrasion protection for pipework above or under ground

### Adhesive Type

Cross-linked solvent based rubber-resin.

### Technical

Thickness: 0.44 mm  
 Breaking load: 90 N/cm  
 Elongation: 200%  
 Adhesion to Steel: 3.0 N/cm  
 Adhesion to Self: 2.6 N/cm  
 Service Temperature: -20°C to +80°C  
 Breakdown Voltage: 12 kV

### Standard colours





## AT44 - Low Tack PVC Protection Tape

### Features

- Low tack
- Clean peel from most surfaces\*
- Flame retardant
- Conformable
- Water and UV resistant
- Abrasion resistant

### Applications

- Outdoor protection and masking, especially where risk of fire is an issue.
- Aluminium extrusions protection.

### Adhesive type

Solvent based rubber-resin

### Technical

Thickness: 0.13 mm  
 Breaking Load: 23 N/cm  
 Elongation: 150%  
 Adhesion to Steel: 0.3 N/cm  
 Service Temperature: 0°C to +60°C  
 RoHS Compliant: Yes

### Standard colour



## AT200 - Advance Gaffa® Ultra Matt Cloth Tape

### Features

- Flame retardant in situ\*
- Cable friendly clean peel adhesive\*
- Very easy tear and conformable
- Abrasion resistant
- Water resistant
- Very low light reflectance
- Writable surface

### Applications

- Securing and bundling of cables.
- Colour coding on lighting and mixing desks.

### Adhesive type

Solvent free rubber - resin.

### Technical

Thickness: 0.26 mm  
 Breaking Load: 40 N/cm  
 Elongation: 20%  
 Adhesion to Steel: 4.5 N/cm  
 Adhesion to Self: 2.6 N/cm  
 Service Temperature: -10°C to +80°C  
 RoHS Compliant: Yes

### Standard colours



## AT205 - Advance Gaffa® Matt Black Foil Tape

### Features

- Matt non-reflective finish
- Flame retardant and self-extinguishing
- Excellent temperature range
- Water resistant in situ
- Conformable

### Applications

- For blocking off light leakages on heat generating equipment such as projectors, light cans, barn doors and similar equipment.

### Adhesive Type

Dispersion acrylic.  
 High temperature and UV resistance.

### Technical

Thickness: 0.09 mm  
 Breaking Load: 35 N/cm  
 Elongation: 11%  
 Adhesion to Steel: 4.0 N/cm  
 Adhesion to Self: 4.0 N/cm  
 Service Temperature: -20°C to +150°C  
 RoHS Compliant: Yes

### Standard colour





## AT501 - Reinforced Aluminium Foil Tape

### Features

- Scrim reinforced for greater strength
- Flame retardant
- Resistant to high and low temperatures
- Water resistant

### Applications

- Joining foil faced insulation panels and pipe sections.
- Joining fibre insulation between the internal skin and fuselage of aircraft.
- Sealing joints in metal ducting.

### Adhesive type

Dispersion acrylic

### Technical

Thickness: 0.14 mm  
 Breaking Load: 45 N/cm  
 Elongation: 5%  
 Adhesion to Steel: 6 N/cm  
 Service Temperature: -40°C to +120°C

### Specification

BS476 Class 0 can be achieved with this product when used in conjunction with other suitable products.

### Standard colour



## AT502 / AT500 / AT506 - Aluminium Foil Tapes

### Features

- Flame retardant and self-extinguishing
- Resistant to high temperatures
- Easy unwind and tear
- Excellent water vapour resistance
- Available in different foil thickness: AT502 (30 micron), AT500 (40 micron) and AT506 (50 micron)

### Applications

- Sealing metal or plastic ducting.
- Insulation of heater casings and high pressure steam pipe insulation.
- Sealing cold store insulation.
- Heat reflection.

### Adhesive type

Dispersion acrylic

### Technical

Service Temperature: -40°C to +110°C

### Specification

Conforms to:  
 BS476 Part 6 & Part 7 Category 1 - Fire  
 Class M1  
 Class O

### Standard colour



## AT510 - Matt Black Foil Tape

### Features

- Matt non-reflective finish
- Flame retardant and self-extinguishing
- Excellent temperature range
- Very easy unwind and tear
- Water resistant in situ
- Conformable to awkward shapes

### Applications

- Solar panel installation
- Sealing black ducting insulation

### Adhesive type

Dispersion acrylic

### Technical

Thickness: 0.09 mm  
 Breaking Load: 35 N/cm  
 Elongation: 11%  
 Adhesion to Steel: 4.0 N/cm  
 Adhesion After Water Immersion: 4.0 N/cm  
 Service Temperature: -20°C to +150°C  
 RoHS Compliant: Yes

### Standard colour





## AT525 - 35 Micron Copper Foil Shielding Tape

### Features

- ✓ Non-conductive acrylic adhesive
- ⚠ Resistant to high and low temperatures
- ✓ Can be easily soldered
- ➡ Easy unwind

### Applications

- Used for EMI / RFI and static shielding.

### Adhesive type

Non conducting thermosetting solvent based acrylic

### Technical

Thickness: 0.035 mm  
Breaking Load: 40 N/cm  
Adhesion to Steel: 4.5 N/cm  
Service Temperature: -20°C to +155°C  
RoHS Compliant: Yes

### Specification

Relevant BS EN 60454 - Part 2 test method  
Relevant ASTM D - 1000 test method  
In-house tests conforming to the flame retardant requirements of UL 510



## AT526 - 35 Micron Copper Foil Shielding Tape

### Features

- ➡ Easy unwind
- ✓ Easily soldered
- ✓ High and Low Temperature Resistant
- ➡ Electrically conductive thermosetting acrylic adhesive

### Applications

- Used for EMI / RFI and static shielding.

### Adhesive type

Conductive thermosetting solvent based acrylic

### Technical

Thickness: 0.035 mm  
Breaking Load: 40 N/cm  
Adhesion to Steel: 4.5 N/cm  
Service Temperature: -20°C to +155°C  
RoHS Compliant: Yes

### Specification

Military specification MIL-T-47012  
Relevant BS EN 60454 - Part 2 test method  
Relevant ASTM D - 1000 test method  
In-house tests conforming to the flame retardant requirements of UL 510



## AT528 - 35 Micron Copper Foil Shielding Tape

### Features

- ✓ Conductive acrylic adhesive
- ⚠ Resistant to high and low temperatures
- ✓ Can be easily soldered
- ➡ Easy unwind

### Applications

- Used for EMI / RFI and static shielding.

### Adhesive type

Conductive thermosetting solvent based acrylic

### Technical

Thickness: 0.050 mm  
Breaking Load: 85 N/cm  
Adhesion to Steel: 4.5 N/cm  
Service Temperature: -20°C to +155°C  
RoHS Compliant: Yes

### Specification

Military specification MIL-T-47012  
Relevant BS EN 60454 - Part 2 test method  
Relevant ASTM D - 1000 test method  
In-house tests conforming to the flame retardant requirements of UL 510





## AT536 - 35 Micron Tin Clad Copper Foil Shielding Tape

### Features

- ✔ Electrically conductive acrylic adhesive
- ⊕ High and Low Temperature Resistant
- ✔ Easily soldered
- ➡ Easy unwind
- ✔ Resistant to ozone, oils, chemicals & water due to the tin layer

### Applications

- Used for EMI / RFI and static shielding where maximum effectiveness combined with good environment resistance's are required.

### Adhesive type

Conductive thermosetting solvent based acrylic

### Technical

Thickness: 0.035 mm  
 Breaking Load: 40 N/cm  
 Adhesion to Steel: 5.0 N/cm  
 Service Temperature: -20°C to +155°C  
 RoHS Compliant: Yes

### Specification

Relevant BS EN 60454 – Part 2 test method  
 Relevant ASTM D – 1000 test method In-house tests conforming to the flame retardant requirements of UL 51



## AT541 - 40 Micron Aluminium Foil Masking Tape

### Features

- ✔ Laminated with a self adhesive removable polyester masking tape
- ➡ Easy unwind
- ✔ Electrically conductive acrylic adhesive
- ✔ Resistant to chemical, heat, acid and alkali
- ⊕ High and Low Temperature Resistant

### Applications

- Applied prior to powder coating, the polyester masking tape will withstand powder coat baking temperatures up to +200°C.

### Adhesive type

Conductive thermosetting solvent based acrylic

### Technical

Thickness: 0.040 mm  
 Breaking Load: 25 N/cm  
 Elongation: 8%  
 Adhesion to Steel: 4.5 N/cm  
 Service Temperature: -20°C to +155°C  
 RoHS Compliant: Yes

### Specification

Military specification MIL-T-47012 Relevant BS EN 60454 – Part 2 test method  
 Relevant ASTM D – 1000 test method In-house tests conforming to the flame retardant requirements of UL 51



## AT544 - 35 Micron Copper Foil Shielding Tape

### Features

- ✔ Conductive acrylic adhesive
- ✔ Removable Polyester Masking Strip
- ⊕ High and Low Temperature Resistant
- ✔ Resistant to ozone, oils, chemicals and water
- ➡ Easy unwind

### Applications

- Applied onto the inner door sections of electronic cabinets prior to powder coating or spray painting.

### Adhesive type

Conductive solvent based acrylic

### Technical

Thickness: 0.035 mm  
 Breaking Load: 40 N/cm  
 Elongation: 5%  
 Adhesion to Steel: 5.0 N/cm  
 Service Temperature: -20°C to +155°C  
 RoHS Compliant: Yes

### Specification

Military specification MIL-T-47012 Relevant BS EN 60454 – Part 2 test method  
 Relevant ASTM D – 1000 test method In-house tests conforming to the flame retardant requirements of UL 51





# AT712 - Nuclear Tape

### Features

- ✓ Low halogen content
- ✓ Clean peel from most surfaces\*
- ✓ Water resistant
- ✓ Abrasion resistant
- ✓ Individually labelled rolls indicating PMUC approval
- ✓ Minimal reaction to specialised steel surfaces

### Applications

- Joining sheeting, sealing bags and sheeting.
- Protection of stainless steel pipework.
- Supporting temporary curtains.
- Sealing protective overalls.

### Adhesive type

Solvent free rubber-resin

### Technical

Thickness: 0.27 mm  
 Breaking Load: 41 N/cm  
 Elongation: 18%  
 Adhesion to Steel: 6.0 N/cm  
 Adhesion to Self: 3.5 N/cm  
 Service Temperature: -35°C to +70°C  
 RoHS Compliant: Yes

### Specification

AT712 in white conforms to NNC (UK) and EDF (FRANCE) Specifications total Halides 1000PPM Max Total and Sulphur 1000PPM Max  
 Conforms to: Fire Class M1

### Standard colours



# AT2002 - High Specification Flame Retardant Cloth Tape

### Features

- ✓ Flame retardant - conforms to FAR 25.853
- ✓ Specification printed onto tape for easy identification
- ✓ Clean peel from most surfaces\* up to 4 days at +50°C
- ✓ Excellent adhesion level
- ✓ Water and abrasion resistant

### Applications

- Protection and joining during building and/or maintenance of aircraft, ships, submarines and trains.
- Sealing gaps between flame retardant panels.
- Joining hardboard partitions in cargo holds.
- Jointing of FR material on offshore oil rigs.

### Adhesive type

Solvent free rubber-resin

### Technical

Thickness: 0.23 mm  
 Breaking Load: 38 N/cm  
 Elongation: 45%  
 Adhesion to Steel: 6.0 N/cm  
 Adhesion to Self: 4.5 N/cm  
 Service Temperature: -10°C to +60°C  
 RoHS Compliant: Yes

### Specification

Meets Federal Aviation specification FAR 25.853 covering flame retardancy.

### Standard colour



# AT4001 - Glass Cloth Tape Class B 130°C

### Features

- ✓ High mechanical strength
- ✓ High temperature resistance
- ✓ Thermosetting adhesive
- ✓ Conforms to BS EN 60454-3-8 Type 1

### Applications

- Electrical insulation of coils.
- Insulation of square conductors in traction motors and generators.
- Tensional strapping of coils and armature windings.
- Termination building to protect the external layer of winding.

### Adhesive type

Thermosetting solvent based rubber-resin

### Technical

Thickness: 0.18 mm  
 Breaking Load: 280 N/cm  
 Elongation: 5%  
 Adhesion to Steel: 3.0 N/cm  
 Breakdown Voltage: 2.5 kV  
 RoHS Compliant: Yes

### Specification

Recognised by UL. BS EN 60454-3-8 Type 1

### Standard colour







## AT4002 - Coil Insulation Glass Cloth Tape Class F 155°C

### Features

- ✓ High mechanical strength
- ⓘ High temperature resistance

### Applications

- Electrical insulation of coils.
- Insulation of square conductors in traction motors and generators.
- Tensional strapping of coils and armature windings.
- Termination building to protect the external layer of winding.

### Adhesive type

Solvent based acrylic

### Technical

Thickness: 0.18 mm  
 Breaking Load: 280 N/cm  
 Elongation: 5%  
 Adhesion to Steel: 3.0 N/cm  
 Breakdown Voltage: 2.5 kV  
 RoHS Compliant: Yes

### Specification

Recognised by UL. BS EN 60454-3-8 Type 2

### Standard colour



## AT4003 - Glass Cloth Tape Class H 180°C

### Features

- ✓ High mechanical strength
- ⓘ High temperature resistance
- ⓘ Thermosetting adhesive
- ✓ Conforms to BS EN 60454-3-8 Type 3

### Applications

- Electrical insulation of coils.
- Insulation of square conductors in traction motors and generators.
- Tensional strapping of coils and armature windings.
- Termination building to protect the external layer of winding.

### Adhesive type

Silicone

### Technical

Thickness: 0.18 mm  
 Breaking Load: 280 N/cm  
 Elongation: 5%  
 Adhesion to Steel: 3.0 N/cm  
 Breakdown Voltage: 2.5 kV  
 RoHS Compliant: Yes

### Specification

Recognised by UL. BS EN 60454-3-8 Type 3

### Standard colour



## AT4004 - Coil Insulation Polyester Tape Class B 130°C

### Features

- ✓ Rubber Thermosetting Adhesive
- ⓘ High Electrical Strength
- ⓘ High Breaking Load
- ⓘ High Temperature Resistant
- ✓ Solvent Resistant
- ✓ Recognised by UL

### Applications

- Electrical insulation of coils electrolytic capacitors and small transformers
- Core and inter layer insulation
- Phase separation of small 3 phase motors
- Screening, termination and binding to protect external layer of winding from dirt and dust

### Technical

Thickness: 0.06 mm  
 Breaking Load: 45 N/cm  
 Elongation: 90%  
 Adhesion to Steel: 3.8 N/cm  
 Service Temperature: 0°C to +130°C  
 RoHS Compliant: Yes

### Specification

Recognised by UL (Test method UL.510)

### Standard colour



### Adhesive Type

Dispersion acrylic.  
 High temperature and UV resistance.



DISTRIBUTED BY

**Advance Tapes International Ltd**  
Westmoreland Avenue  
Thurmaston  
LE4 8PH, England

**Call:** 00 44 (0)116 251 0191

**Fax:** 00 44 (0)116 265 2046

**Email:** [sales@advancetapes.com](mailto:sales@advancetapes.com)

**[www.advancetapes.com](http://www.advancetapes.com)**



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