



tesa[®] flame retardant and halogen-free mounting

Assortment of double-sided tapes for mounting applications
with demanding requirements on fire protection



Proven and reliable: our flame retardant and halogen-free tape solutions

To ensure health and asset protection, fire safety regulations are of special importance in a variety of industries, such as aviation, trains, marine, building and construction, elevators, automotive and e-mobility.

Our tesa® flame retardant assortment complies with fire regulation standards and all tapes are halogen-free, which supports smoke reduction and less gas toxicity. The wide variety of the assortment extends from thin double-sided tapes for lamination demands to the PE- and acrylic foam products for the constructive solutions.

Advantages of our flame retardant tapes:

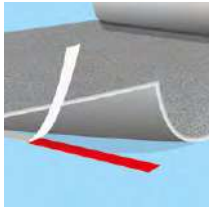
- Compliance and fulfillment acc. to industry standards UL94 and FMVSS 302
- All products are halogen-free
- High performance on a variety of surfaces
- Reliable long-term bonding
- Large assortment for a wide range of applications

Thin tapes with filmic and non-woven backing

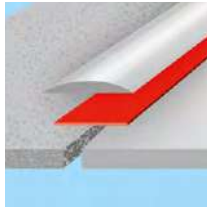
tesa® flameXtinct 45051, tesa® 58372, 58373, 58375



The thin double-sided flame retardant adhesive tapes are available with product thicknesses from 50 µm to 200 µm. Flexible PET and non-woven backing makes them suitable for laminating applications with flame retardant requirements. The high-performance acrylic adhesive makes the products optimal for a variety of applications with low carrier thicknesses.



Carpet laying



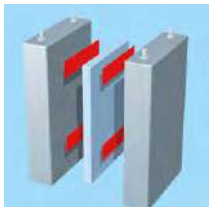
Flooring trims

Product advantages:

- Tested acc. to UL94 and FMVSS 302
- Halogen-free products
- High initial performance and bonding strength on polar substrate
- Excellent die-cutting properties in the converting process
- Transparent and translucent backing for invisible bonding

Main applications:

- Various mounting applications in the EV battery system (e-mobility market)
- General mounting, lamination and converting application with flame retardant properties



EV battery
cell-to-cell bonding



General mounting
(e.g. e-mobility market)

Acrylic core backing

tesa® flameXtinct 45063 and 45065



tesa® flameXtinct 45063, 45065 are flame retardant acrylic core tapes for permanent bonding applications. The acrylic core allows for the compensation of thermal elongation and good adhesion to various substrates such as: metals, powder coated surfaces, glass and plastics.



Mirror mounting



Front panels

Product advantages:

- Proven flame retardant characteristics according to UL94 and FMVSS 302
- Premium acrylic core for high demanding applications
- Viscoelastic product properties
- High performance adhesive
- Halogen-free

Main applications:

- Stiffener bar mounting e.g. in elevator walls and landing doors (building industry)
- Bonding of decoration profiles and kick plates e.g. appliance industry
- Long-term bonding of decorative and constructive elements for e.g. train, marine or special vehicle applications



Display and operating
elements



Stiffener bar mounting

PE foam backing tesa® flameXtinct 45001



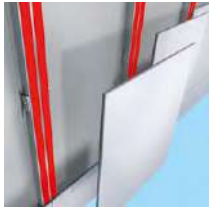
tesa® flameXtinct 45001 product is a flame retardant PE-foam tape for permanent mounting in demanding applications. The tape comprises of a flame retardant acrylic adhesive and flame retardant PE-foam with excellent bonding strength.

Product advantages:

- Proven flame retardant characteristics according to UL94 (HBF-HF1)
- Halogen-free (conformable acc. REACH and ROHS)
- Excellent adhesion characteristics on a variety of surfaces
- High conformability and shock absorbing
- Extremely light weight compared to alternative flame retardant bonding opportunities

Main applications:

- Stiffener bar mounting e.g. in elevator walls and landing doors (building industry)
- Fastening of lightweight components (e.g. marine and special vehicles)
- Bonding in the passenger area of trains



Wall cladding
(light weight)



Decorative panels



Stiffener bar mounting



Lightweight cover
elements

Testing and certification process of tesa® solutions



Comprehensive R&D and laboratory support.

Our Customer Solution Center provide exclusive testing by analyzing of industry standard materials in combination with our adhesive tape solutions solutions. Customized tests for special materials are also possible in order to certify individual combinations. We test, for example, the adhesive performance, flammability (based on UL 94) and climate cycle tests. In some cases, these go beyond what the respective standards require of our products and are the basis for the extraordinarily high quality of our adhesive tape solutions.

Flame retardant and halogen free tapes – our assortment

Product	Filmic and non-woven backing				PE-foam	Acrylic Core	
	tesa® 58372	tesa® 58373	tesa® 58375	tesa® flameXtinct 45051	tesa® flameXtinct 45001	tesa® flameXtinct 45063	tesa® flameXtinct 45065
Total thickness [µm]	50	80	130	200	1,000	800	1,200
Color	Translucent	Transparent	Translucent	Transparent	White	White	White
Type of adhesive	FR modified acrylic	FR modified acrylic	FR modified acrylic	FR modified acrylic	FR modified acrylic	Acrylic	Acrylic
Backing	PET	PET	Non-woven	PET	FR modified PE-foam	FR acrylic core	FR acrylic core
Liner	Glassine, white (red logo)	Glassine, white (red logo)	Glassine, white (red logo)	MOPP, red	MOPP, red	PE-coated paper	PE-coated paper
Temperature resistance long-term [°C]	125	125	125	100	80	80	80
Adhesion to steel (ASTM) [N/cm]	8.5	8.2	8.9	12	22	28	28
Tests and approvals							
Halogen-free	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tested acc. to UL94	VTM-0	VTM-0	VTM-0	VTM-0	HBF HF-1	V-2	V-2
Tested acc. to FMVSS 302	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Available dimensions							
Log dimensions	100 m x 1,250 mm	100 m x 1,250 mm	100 m x 1,250 mm	50 m x 1,360 mm	50 m x 1,360 mm	33 m x 500 mm	33 m x 500 mm
Slitter (rolls with individual dimensions)	Available	Available	Available	Available	Available	Available	Available

tesa® products prove their impressive quality day in, day out in demanding conditions and are regularly subjected to strict controls. All technical information and data above mentioned are provided to the best of our knowledge on the basis of our practical experience. They shall be considered as average values and are not appropriate for a specification. Therefore tesa SE can make no warranties, express or implied, including, but not limited to any implied warranty of merchantability or fitness for a particular purpose. The user is responsible for determining whether the tesa® product is fit for a particular purpose and suitable for the user's method of application. If you are in any doubt, our technical support staff will be glad to support you.



Our management system is certified according to the quality standards ISO 9001, ISO/TS 16949, and ISO 14001

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