

# tesa® 59652 – Team 4965 Black

### **Product Information**

205µm double sided black film tape
Also referred to as order number tesa® 59652

# **Product Description**

tesa® 4965 Black is a double-sided self-adhesive tape consisting of a black PET backing and a modified acrylic adhesive and is based on a patented and protected product formulation. Several products are equipped with this unique and high performing product design and together these products make up Team 4965. This double-sided film tape assortment helps to easily select the most efficient tape based on customer demands, products, and processes. tesa® 4965 Black can be ordered using order number tesa® 59652. Explore the benefits of the full tesa® 4965 assortment here: https://www.tesa.com/en/industry/general-applications/mounting/team-4965-assortment

#### tesa® 4965 Black features:

- · An excellent balance of high shear resistance, adhesion performance and initial tack
- Secure bond even to critical surfaces such as low surface energy materials (e.g. PP and PE) and powder painted substrates
- Outstanding holding power
- Black color to optimize automatic pick and place processes

#### **Product Features**

- · Opaque black backing with light-blocking properties
- Reliable bond even on low surface energy surfaces
- Skin contact certification according to ISO 10993-5 and ISO 10993-10
- Immediate usability right after assembly
- Black color for automatic pick-and-place processes
- Low VOC measured according to VDA 278 analysis

### **Application Fields**

- · LED strip mounting
- · Optical detection splicing
- Mounting of lenses and cushioning foams in cellular phones
- · Mounting of exterior car mirrors in the automotive industry

# Technical Information (average values)

The values in this section should be considered representative or typical only and should not be used for specification purposes.





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# **Product Information**

# **Product Construction**

| • | Backing material | PET film          | • | Colour             | black               |
|---|------------------|-------------------|---|--------------------|---------------------|
| • | Type of adhesive | tackified acrylic | • | Colour of liner    | brown/blue logo     |
| • | Type of liner    | paper             | • | Thickness of liner | 69 μm               |
| • | Total thickness  | 205 μm            | • | Weight of liner    | 80 g/m <sup>2</sup> |

# **Properties/Performance Values**

| • | Elongation at break    | 50 %         | • | Static shear resistance at 23°C | very good    |
|---|------------------------|--------------|---|---------------------------------|--------------|
| • | Tensile strength       | 20 N/cm      | • | Static shear resistance at 40°C | very good    |
| • | Ageing resistance (UV) | good         | • | Tack                            | good, medium |
| • | Chemical resistance    | good         | • | Temperature resistance long     | 100 °C       |
| • | Humidity resistance    | very good    |   | term duration                   |              |
| • | Softener resistance    | good, medium | • | Temperature resistance min.     | -40 °C       |
|   |                        |              | • | Temperature resistance short    | 200 °C       |
|   |                        |              |   | term duration                   |              |

# Adhesion to Values

| • | ABS (initial)             | 10.8 N/cm | • | PET (after 14 days)        | 11.9 N/cm |
|---|---------------------------|-----------|---|----------------------------|-----------|
| • | ABS (after 14 days)       | 11.9 N/cm | • | PP (after 14 days)         | 8.8 N/cm  |
| • | Aluminium (initial)       | 10.2 N/cm | • | PP (covered side, initial) | 6 N/cm    |
| • | Aluminium (after 14 days) | 12.6 N/cm | • | PS (initial)               | 10.4 N/cm |
| • | PC (initial)              | 12.2 N/cm | • | PS (after 14 days)         | 12.1 N/cm |
| • | PC (after 14 days)        | 13.4 N/cm | • | PVC (initial)              | 9.6 N/cm  |
| • | PE (initial)              | 5.6 N/cm  | • | PVC (after 14 days)        | 12.8 N/cm |
| • | PE (after 14 days)        | 6.6 N/cm  | • | Steel (initial)            | 11.5 N/cm |
| • | PET (initial)             | 9.8 N/cm  | • | Steel (after 14 days)      | 14 N/cm   |
|   |                           |           |   |                            |           |

### **Additional Information**

Liner variants:

PV20: branded brown paper liner (69μm; 80g/m²)



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**Product Information** 

### Disclaimer

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