

Quick Facts

Become an industry expert

FINE-LINE MASKING

- Fine-line masking is the most important and critical part of paint masking.
- tesa defines fine-line masking as a two-tone or design paint process in marine, truck, bus, and RV applications.
- A precise process analysis is necessary as all customers will have variances.

PAPER MASKING

- Marine: Masking on release coat (wax)
 - Requires high adhesion
- Aerospace: Surfaces are exposed to solvent pre-treatment and direct cleaning
 - May require solvent resistance
- Bus, RV, & Truck: Adhesion to a variety of substrates (metal, painted metal, fiberglass, plastic, etc.) at low temperatures
 - Requires high conformability

SURFACE PROTECTION

- Long-term UV-resistant products
 - Long-term is defined as a period of 90 days with clean removal
 - Substrates include; vinyl, glass, metal, fiberglass, painted metal
 - Drive-away applications make long-term UV a necessity for bus and RV applications
- Short-term UV-resistant products
 - Short-term is defined as a period less than 45 days with clean removal
 - Substrates vary; fiberglass, carpet, wood, metal, glass
 - Marine applications require clear product for gel coat inspection

FINE-LINE MASKING

Products	Thickness (mils)	Adhesion/Steel (oz/inch)	Adhesive	Elongation at Break (%)	Temp. Resistance (°F)	UV Resistance
tesa® 4215	4.7	20	rubber	>350	250	
tesa® 4244 PV2	5.4	49	rubber	252	285	
tesa® 4244 PV0	4.7	42	rubber	250	320	
tesa® 4174	4.3	31	rubber	200	300	
tesa® 50589	5.2	23	acrylic	200	320	
tesa® 50587	5.1	16	rubber	170	210	
tesa® 7133	3.2	18	rubber	30	250	

PAPER MASKING

tesa® 4304	7.1	44	rubber	12	285	
tesa® 4308	6.7	36	rubber	11	230	
tesa® 4318 PV2	6.7	36	rubber	14	320	
tesa® 4309	6.8	32	rubber	12	250	
tesa® 4305	6.7	36	rubber	14	250	
tesa® 53134	6	30	rubber	12	175	
tesa® 4407	5.9	31	acrylic	15	210	++
tesa® 50124	5.6	26.5	rubber	10	205	

SURFACE PROTECTION

tesa® 50530	3.2	9.1	synthetic elastomer			++
tesa® 50535	2.4	7.3	synthetic elastomer			++
tesa® 50550	2.6	9.1	synthetic elastomer			++
tesa® 4848	2	17.3	acrylic			+
tesa® 51132	3.3	25.5	acrylic			+
tesa® 51134	3.3	21.8	acrylic			0
tesa® 51136	4.1	21.8	acrylic			0
tesa® 53400	4.6	61	rubber			0
tesa® 4851	4.9	36	rubber			0
NOPI 4090	2.7	55	rubber			0

(++) Excellent, (+) Good, (0) Limited

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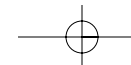
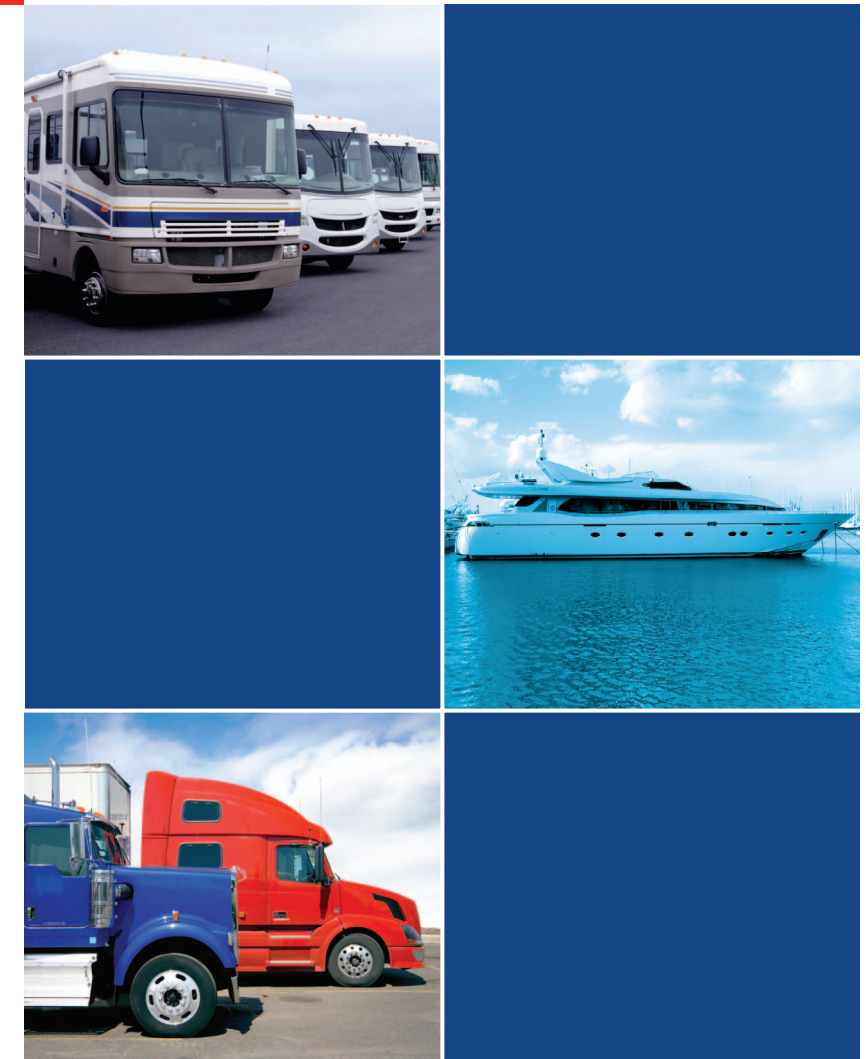
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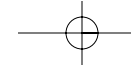
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tesa® Product Selection Guide

Fine-line Masking • Paper Masking • Surface Protection





Problems & Solutions

Solving common application issues

Engaging Your Customer

The questions you should be asking

Product Selection

Finding the best product for your application



FINE-LINE MASKING

Splintering

- An uneven, splintered paint line after tape removal as a result of improper tape positioning in grooves.
- Solution**
 - Apply the tape precisely a few tenths of an inch beside the bottom of the groove.
 - This precise positioning is easily done with an applicator.

Overspray (lifting off)

- Overspray is paint residue in areas which should be protected by a fine-line/over-masking product.
- Overspray normally is a result of unwanted lifting of fine-line tape.
- Solution**
 - Apply the tape without tension.
 - Use die-cuts when applicable.
 - Try using a natural rubber adhesive instead of an acrylic for critical applications.

Residues

- Residues are pressure-sensitive adhesive materials remaining on the surface upon removal.
- Solution**
 - Test compatibility of tape and specific material under process conditions.
 - Try an acrylic adhesive when natural rubber appears to leave residues and vice versa.

Ghosting

- Faint surface changes noticed after tape is removed. After removal of tape, a trace or shadow of the tape remains visible. This differs from tape residue.
- Solution**
 - Surface cleaning may remove the ghosting in some cases; and in other cases the ghosting effect may be permanent.
 - Test compatibility of tape and specific material under process conditions.
 - Try an acrylic adhesive when a natural rubber is causing ghosting.

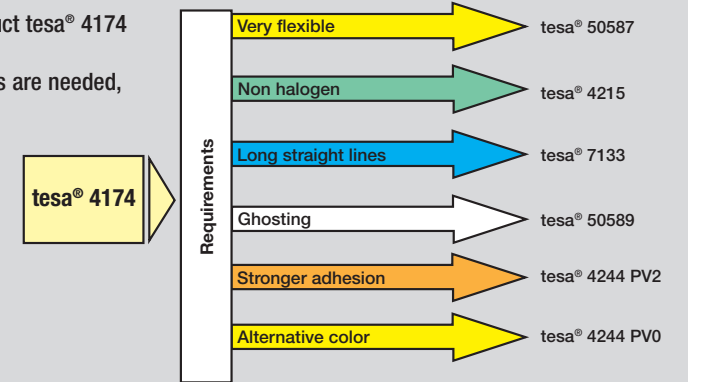
PAPER MASKING

- What temperature is the substrate exposed to?
- How long at that temperature?
- What is the substrate; painted, bare metal, ecoat, etc.?
- What type of paint do you use?
- What cleaners are used on the substrate before masking?
- Do you use masking paper or films?
- How many vehicles do you manufacture per day?
- Do you track offline/repair data?
- What is the leading cause for offline/repair work?

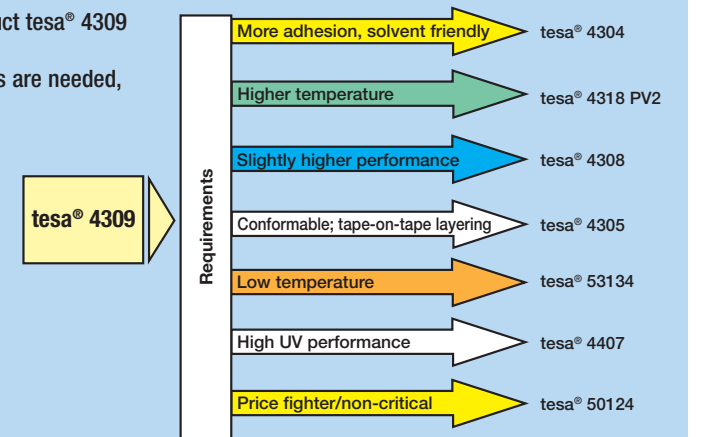
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- Will the surface be exposed to outdoor elements such as; UV, temperature, chemicals, environmental conditions, etc?
- What type of surface will the film be applied to?
- Describe the surface. Is it smooth, rough, textured, round?
- How long do you plan to leave the film on the surface?
- What hazards may threaten the surface?
- Do you currently track rework or warranty claims due to surface damage?
- What do you currently use for protection? What do you like/dislike about this product?

- Suggested starting product tesa® 4174
- If additional requirements are needed, follow the decision tree



- Suggested starting product tesa® 4309
- If additional requirements are needed, follow the decision tree



SURFACE PROTECTION

- Application areas for the temporary protection assortment include freshly-painted exterior surfaces, decorative trims and emblems, delicate interior surfaces such as upholstery, countertops, appliances, carpets, glass and more.
- tesa® permanent protection solutions protect against corrosion and mechanical damages. Other permanent protection areas include vehicle identification numbers, covering of sharp-edged holes to minimize abrasion, and stone chip protection.

