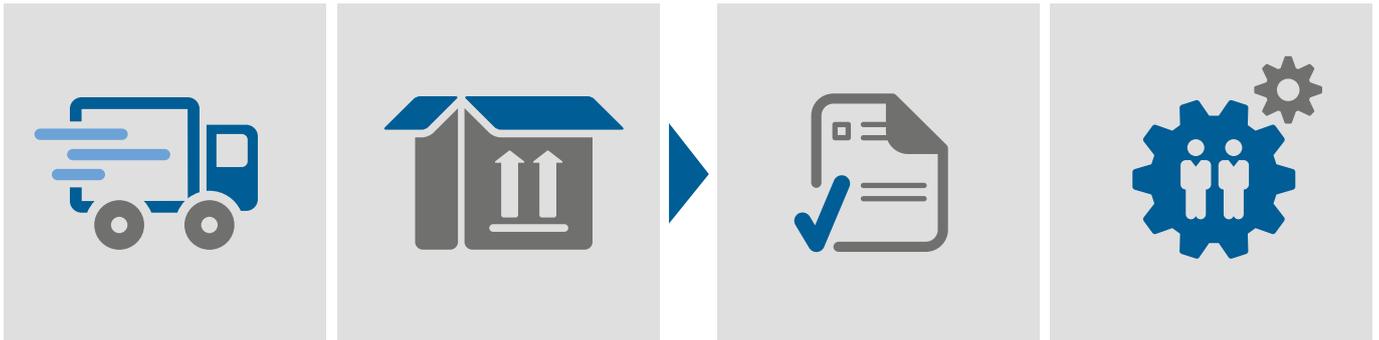


Recommendations for Transportation, Storage and Processing of Labels

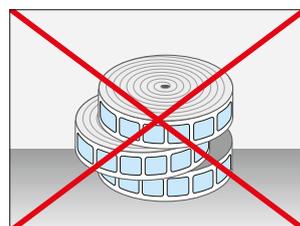
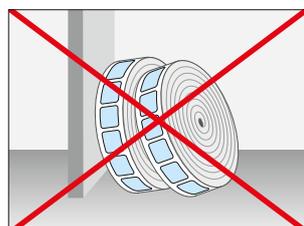
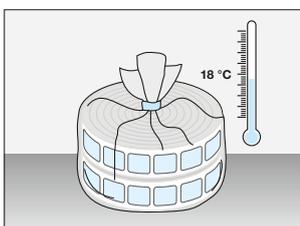


Transportation of Label Rolls

- Protect the label rolls against exposure to sunlight and avoidable heat input.
- Transport the label rolls in the PE bag or shrink wrap of the original packaging in cool and dry conditions and avoid severe temperature fluctuations until processing them.
- Stack the label rolls on top of each other, lying flat and centered.
- No external pressure, e.g. due to excessively tight packaging or weight from above.
- For extended periods of intermediate storage during transportation, store low-viscosity (free-flowing) adhesives at temperatures of <math><12\text{ }^{\circ}\text{C}</math>/54 °F, if possible. Specialists from Schreiner Group will be pleased to advise you on which products contain low-viscosity adhesives and whether or not they require special transportation precautions.

Storage of Label Rolls

- Protect the labels against exposure to sunlight and avoidable heat input, e.g. from radiators.
- Store the label rolls in the PE bag or shrink wrap of the original packaging in cool and dry conditions and avoid severe temperature fluctuations (recommended conditions: 18–25 °C/64–77 °F,
- 40–60 % relative humidity).
- Stack the label rolls on top of each other, lying flat and centered.
- No external pressure, e.g. due to excessively tight packaging or weight from above.
- For extended periods of intermediate storage during production, store low-viscosity (free-flowing) adhesives at temperatures of <math><12\text{ }^{\circ}\text{C}</math>/54 °F, if possible. Specialists from Schreiner Group will be pleased to advise you on which products contain low-viscosity adhesives and whether or not they require special storage precautions.



Preparation of Label Processing

Unless otherwise agreed with you, labels should be processed within 12 months after delivery.

Cleaning Instructions for Substrate Surfaces



- The surface of the adhesion substrate must be dry and free of dirt, oil residues and release agents.
- Loose surface particles or oxidation layers reduce durability as an adhesion-bonded joint is only as strong as its substrate.
- Recommended cleaning agents are grease-free solvents such as isopropyl alcohol/2-propanol (1:1 water mixture), acetone, MEK or cleaning solvents/petroleum benzine. Please test the substrate for compatibility with the solvent before use. In case of incompatibility of the cleaning agent with the adhesion substrate, please select a different cleaning agent.
- Additives such as plasticizers contained in plastics may adversely affect adhesive properties. Please provide us with information on the specific characteristics of your surfaces prior to product development so that our specialists may evaluate the surface properties. We will not be able to assume any warranty unless this information is provided to us.
- Surfaces may vary in terms of their properties and exhibit different adhesive strength effects. We will not be able to assume any warranty for the utilization of products on surfaces that have not been coordinated with us.

General Information on Label Dispensing

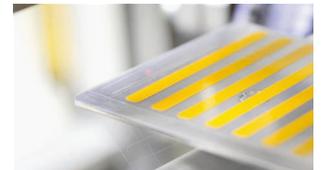
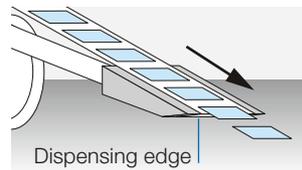
- Please observe the minimum application temperature for labels specified by us.
- Apply contact pressure to labels after application, e.g. using a squeegee, pressure roll or pressing fixture, to ensure adhesion. Contact pressures and contact times vary according to product and surface characteristics and must be specifically determined as part of product qualification.

Manual Label Dispensing

For manual dispensing of labels, please consult with our specialists.

- When dispensing labels manually, please keep in mind that skin lipids and “parking” of labels on work clothes will have an adverse effect on adhesive properties.

Automated Label Dispensing



- An acute angle of the dispensing edge improves dispensing (stripping) performance.
- Keep the dispensing edge burr-free.
- Keep all movable elements of the web/tape guide running smoothly by regular cleaning.
- Keep optical and mechanical scanning elements dust-free and clean.
- Do not subsequently tighten the label rolls—either manually or inside the printing or dispensing system.

Specific Information on Thermal Transfer Overprinting

- Regularly remove dust from the inside of the printer when changing rolls.
- Do not touch the printing areas when changing rolls; only touch the beginning of a roll, using gloves if necessary.

Specific Information for RFID Labels

The following should be avoided:

- Electrical charges above +/- 2 kV peak maximum
- Alternating magnetic fields
- Microwaves
- Gamma rays
- Folding or unnecessary bending of the ((rfid)) label
- Damaging contact pressure or impact on the ((rfid)) label
- Tossing of the roll or inadequately protected shipping (use specialty cardboard or sufficient dunnage)

Specific Information for Caps (Flexi-Cap)

- The application of the caps in combination with the label poses special challenges. Please consult with Schreiner Group's specialists in this case. The storage and transportation conditions for labels apply to caps as well.

Important Note

The above information is provided strictly as basic information, which may be extended or modified by specifications and agreements adapted to the respective products such as documents created during the development process. Before using a product, please obtain qualified advice from the specialists of Schreiner Group or perform your own tests to determine if the product concerned is suitable for your intended purpose, also with respect to potential influences that may affect the application (e.g. transportation, storage or processing conditions).