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Applied to Life.™

3M Industrial Adhesive Tapes, Adhesives  
and Labeling Systems

# Labels. For the packaging and container industry.

Complex supply networks, such as in the automotive industry, function smoothly due to sophisticated container management.

But what would containers be without container labels? Only if the content of a load carrying unit can be identified with the naked eye, by barcode, or RFID scanner in real time, does the container fulfill its function.

The areas of use and cycles of containers vary greatly. The same applies to the label requirements. We have compiled and presented some examples illustrating what conditions you may face.



# Labeling of intermediate bulk containers, here combination IBCs

## Areas of use:

Containers with a liquid or pasty filling material. Transport in plastic containers with a metal lattice box.

The lattice box bears two identification labels, which, in the case of hazardous materials, must comply with the UN Directive.

## Label requirements:

Aging-resistant and, for the transport of hazardous materials, comprehensive in accordance with the UN Directive

Durable despite high stresses due to weather conditions or chemicals such as acetone or super petro

Resistant to stress resulting from stacking and transport operations.

Labeling still legible after 5 years

Can be smoothly integrated into your in-house processes: In-house printing and automatic affixing and / or application to your containers



Be on the safe side with:  
**3M™ Polyolefin Film FP0366EC,**  
**labeled in a thermal transfer printing**  
**process with 3M™ Ink Ribbon 92904**

# Expanded polypropylene (EPP) containers in the automotive industry

## Areas of use:

Reusable containers for the (intra-) logistics of the automotive industry, which travel between the AOEM plant and the supplier. Precisely fitting produced transport boxes for special components.

The supplier fills the boxes, the content is removed and installed in the plant. The empty containers are returned to the supplier.

## Label requirements:

Very good adhesion to the apolar, foamed substrates

High aging resistance – complete lifecycle of the container

Recycling of containers and labels sorted according to type: with polyolefin / polypropylene / polyethylene film

Can be printed using different printing systems

The producer of foam containers supplies fully labeled containers. AOEMs also use their own company specifications for transport containers. These specifications are often instructions / test specifications for the label.



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**3M™ Polyolefin Film 7777 (Adhesive series AP 360)**



# Reusable plastic container (RPC)

## Areas of use:

Fruit and vegetables are transported from the producer to the point of sale.

For clear assignment, the lattice boxes bear labels which are either applied directly during the injection molding process or, as in this case, are affixed later as self-adhesive labels.

## Label requirements:

Reliable adhesion to difficult plastics

Can be applied with full automation shortly after the injection molding process

Withstands high stresses resulting from folding / stacking and cleaning operations

Resistant to steam jets



Be on the safe side with:  
**3M™ Special Film 92200**

# Small parts containers in intralogistics

## Areas of use:

In-house transport using conveyor belts.

## Label requirements:

Reliable adhesion to difficult plastics

Resists to high stresses resulting from folding, stacking and cleaning operations



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**3M™ Scotchcal™ Film – Series 3690+**

# Big packs for transporting bulk material



## Areas of use:

For deliveries to (large) construction sites, bulk material, or also building materials, are transported in special bags.

To track the materials and quantities, in some cases also to comply with safety regulations, these containers are labeled.

## Label requirements:

Reliable adhesion to structured woven polypropylene fabric

Resistant to UV light, weather conditions, and abrasion

Fully automatic affixing

Be on the safe side with:  
**3M™ Special Film 92200**



# Long live the labeling!

## Efficient labeling of containers

Labeling products is essential when devices, goods, or containers need to be identified and tracked back. Particularly within industry, self-adhesive labels carry important data and information. As a specialist for labeling solutions, 3M, with its innovative strength, also relies on a wealth of experience and an intensive exchange with customers when it comes to container labeling. The result is a comprehensive range of products for the labeling of IBCs (intermediate bulk containers) and combination IBCs.

## Collected information for more security

As users of IBCs are obliged to inspect the containers at regular intervals, the labeling should also be reliable and durable. In addition to a design type approval certificate, a standardized identifier is also granted for each IBC design type for the transport of hazardous goods. This identifier must be permanently legible and attached in a clearly visible position on the container with the United Nations packaging symbol. The label must indicate information about the IBC code, the approved packaging group, month and year of manufacturing, name and logo of the manufacturer, and other identification determined by the competent authority. Information about the net weight, maximum permissible gross weight, capacity, and inspection must also be provided.

## Labeling is a challenge

As the label requirements are often very specific, dialog with the customers is essential for the selection of the suitable material. Information about the substrate, environmental influences, and relevant standards and specifications must be observed. For the labeling of metal lattice boxes (cages), 3M has developed an optimum solution in accordance with the UN Directive. An aging- and humidity-resistant label film made of polyolefin can be used for a wide range of applications and provides great flexibility. Above all, it is characterized by its adhesive strength on different substrates. This includes wet-painted metal, low-energy plastics, stainless steel, talcum or glass fiber reinforced polypropylene, as well as cast aluminum.

## Reliable despite high stresses

Printed with the 3M™ Ink Ribbon 92904, the film reliably withstands high stresses due to weather conditions or chemicals such as acetone, brake fluid, or super petrol. Despite numerous stacking, transport and cleaning operations, the labeling is still legible after five years. Thermal transfer printing and automatic container application can be smoothly integrated into the in-house processes. As print-protecting lamination of the label is not required, time and costs can also be saved to a considerable extent. The 3M labeling solution for IBCs and C-IBCs is thus a reliable and efficient alternative to the labels used to date.

## About 3M

3M masters the art of converting sparkling ideas into thousands of inventive products – in short, it is an innovative company that is constantly inventing new things. The unique culture of creative collaboration is an inexhaustible source for efficient technologies that make life better. With a turnover of almost USD 32 billion, 3M employs roughly 96,000 people worldwide and has branches in more than 70 countries (as of 2019).

More information: [www.3M.de](http://www.3M.de)





Industrial Adhesives & Tapes Division

**Important notice:**

The values presented above have been determined by standard test methods and are average values not to be used for specification purposes. Our recommendations on the use of our products are based on tests believed to be reliable but we would ask that you conduct your own tests to determine their suitability for your applications. Please take all safety and occupational health and safety regulations into account when using this product. All questions of liability relating to this product are governed by the terms of sale subject, where applicable, to the prevailing law.

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