

robos
labels

Labels for the Chemical Industry

Durable Labeling with Maximum Resistance



visions
made
viable

Inform, Protect, Document and Decorate in the Chemical Industry

Hazardous substances and chemicals must be labeled reliably and in compliance with applicable regulations. These include explosive, flammable, toxic, irritant and environmentally hazardous substances, among many others.

The chemical industry therefore requires durable and robust labels for the identification of drums, containers, packaging and means of transport.

Depending on the customer's product and its application environment, labeling must meet specific requirements, such as chemical, thermal or mechanical resistance, as well as security features for protection against counterfeiting.

Many of our products go beyond product identification and visual labeling by providing additional functional benefits.

This is why we refer to them as multidimensional labeling solutions. Additional functionalities can include tamper protection or tamper-evident features that provide clear evidence of first opening.

Our Services & Technology

Our material portfolio includes more than 500 specialty materials. We provide our customers with comprehensive technical information and material samples. On request, these materials can also be individually printed and die-cut under series-production conditions as part of an initial sample approval process.

Many of these materials already meet specific approval requirements for UL/CSA, automotive and medical technology applications. In the UL/CSA sector alone, we have more than 20 of our own listed approvals that can be quickly utilized for individual projects. If the required approval is not yet available, we can manage the entire approval and documentation process.

From a technology perspective, we combine conventional and digital production methods. Industrial labeling applications often involve requirements that cannot yet be fully addressed using digital technologies alone. We therefore combine the strengths of both worlds in an efficient and integrated production approach.

For conventional production, we use flexographic and screen printing as well as multilayer and booklet label production. Our digital printing capabilities include both HP Indigo ElectroInk technology and UV inkjet printing.

The key quality requirements for labeling in the chemical industry are durability, adhesive performance, regulatory compliance and documentation.

Accordingly, high-quality materials and adhesives, combined with state-of-the-art production technologies, are essential.

■ Label Durability

Chemicals, abrasion, heat, cold, indoor/outdoor applications, etc.

■ Label Adhesion

Difficult, rough, oily and low-surface-energy substrates, etc.

■ Label Compliance

Seawater resistance, etc.



Our Capabilities Include:

- **Conventional die-cutting equipment and laser die-cutting technology** for multidimensional functional components, complemented by modern slitting equipment
- **Camera inspection systems and a digital measuring projector** for process control and documentation
- **Automated data handling** using Automation Engine for proofing, step-and-repeat processes and more

Our Subsidiary Folit

Folit GmbH is a wholly owned subsidiary of robos-labels and has specialized in materials from leading manufacturers such as 3M, Flexcon, Tesa and Lintec for over 30 years. Folit is one of the five largest 3M distributors and converters in Europe and also develops customized material combinations for specialized applications. Its modern production facilities include advanced slitting and laminating equipment.

Multifunctional Labeling Solutions for Special Requirements

Our Labels for the Chemical Industry Meet a Wide Range of Requirements:

- Temperature resistance from +300 °C to -196 °C
- UV- and weather-resistant films with durability of up to 10 years
- Very thin films from 6 µm as well as film combinations up to 500 µm
- High-performance materials made from acrylic film, polyimide film, aluminum foil and polyester
- Permanent, repositionable and removable adhesives with excellent adhesion to both high- and low-surface-energy substrates
- Various liner materials available, including densified kraft paper in different thicknesses, transparent plastic liners, double-sided siliconized kraft paper and climate-stable kraft paper
- Suitable for subsequent printing and marking using thermal transfer printing, laser engraving and inkjet technology
- Supplied on rolls or sheets, also suitable for subsequent printing and marking



Tamper-Evident Warning Label with Security Die-Cuts for Curved Surfaces



Securely Adhering Warning Label – Seawater-Resistant in Accordance with BS 5609 Sections II and III



Serialized Label with Partial Die-Cutting for Removable Elements

Serialized and personalized labels can include sequential numbering, coding or individual-specific data. Unique identification for each product, including encrypted codes, also provides numerous opportunities for automated production and logistics processes throughout the entire product lifecycle.

Printed Data Matrix codes can contain extensive additional information that can be accessed from linked databases by scanning 2D and 3D codes. The labels can also be subsequently printed or marked with additional individual data directly at the customer's site.

Smart Labeling Solutions for the Chemical Industry: Robust and Durable Under Extreme Conditions



Compliant Warning Label – Temperature- and Chemical-Resistant



Pipe Identification Label – Secure Adhesion to Curved Surfaces

Labeling with Protective Functions

- Hologram Labels for Anti-Counterfeiting Protection and Premium Product Decoration
- Tamper-Evident Labels for Protection Against Manipulation
- Labels with Security Features for Documenting First Opening or Tampering



Chemical Warning Labels – Suitable for Subsequent Printing

Labeling for Product Decoration

- Labels for Product Decoration

Labels for Subsequent Printing

- Pre-Printed Labels for Subsequent Printing with Variable Data
- Blank Labels for Subsequent Printing with Variable Data

Labels for Cables and Pipes

- Pipe Identification Labels for Reliable Adhesion to Curved Surfaces

Labels with Variable Data

- Serialized and Personalized Labels for Identification with Variable Data
- Barcode Labels for Identification with Variable Data

Labeling for Limited Space

- Booklet and Leaflet Labels for Extensive Information in Limited Space
- Multilayer Labels for Extensive Information in Limited Space and for Concealed Information

Labeling for Extreme Temperature Ranges

- Cryogenic Labels for Extremely Low Temperatures

Labels for Product Identification

- Vial and Tube Labels for Small Diameters and Tight Radii
- Labels for Documenting Information and Processes

Labeling for Challenging Surfaces and Environments

- Chemical- and Solvent-Resistant Labels for Challenging Surfaces
- Outdoor Labels with Maximum Durability for Exterior Applications
- Labels for Low-Surface-Energy Substrates

Labels with Warning and Consumer Information

- Warning Labels for the Chemical Industry
- Tactile Labels with Raised Information, Such as Braille or Warning Symbols

Compliant Labeling

- GHS Labels for Hazardous Substances Ensure Compliant Labeling of Drums and Containers
- Seawater-Resistant Labels for the Reliable Identification of Hazardous Substances in Drums (BS 5609)



Cryogenic Labels with QR Codes for Extremely Low Temperatures



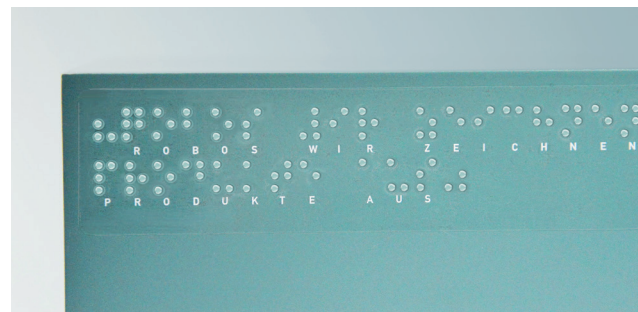
Outdoor Label Resistant to Cleaning and Weathering



Hologram Label with QR Code for Tamper Protection



Labels with Booklets and Leaflets for Hazard Information



Tactile Labels with Braille and Raised Warning Triangles

Labels for the Technical Industry with UL Approval for the North American Market



- Robos-labels has been a manufacturer of UL-certified labels since 1993 and is authorized to print all types of UL certification marks on labels (see Authorized Label Supplier Program, PGAA).
- UL is a globally recognized certification and testing organization whose requirements and testing procedures focus on product safety and integrity.

Certified Labeling Solutions for the Chemical Industry, Technical Industry, Medical Technology and Automotive Industries

As a manufacturer, robos-labels offers a broad portfolio of pre-approved and certified labeling solutions. If additional customer-specific approvals are required, we can manage the complete testing and certification process on request.

We also provide PPF sampling and approval procedures (Production Process and Product Approval) in accordance with the requirements of the German Association of the Automotive Industry (VDA), as well as the US equivalent, PPAP (Production Part Approval Process), in accordance with AIAG (Automotive Industry Action Group) requirements.



Compliant GHS Labels with Hazard Pictograms and QR Codes



Seawater-Resistant Label in Accordance with BS 5609 Sections II and III



Documentation Labels with Multiple Detachable Elements for Application at Different Locations

The Following Standards and Regulations Can Already Be Met with Our Materials:

- UL 969A:2020 Standard for Marking and Labeling Systems – Flag Labels, Flag Tags, Wrap-Around Labels and Related Products
- UL 817 Cord Sets and Power-Supply Cords
- UL 2238 Cable Assemblies and Fittings for Industrial Control and Signal Distribution
- UL 94 Flammability of Plastic Materials for Parts in Devices and Appliances (UL VTM-0 – highest classification)
- FMVSS 302 Flammability of Interior Materials (Burning Behavior/Burn Rate)
- FORD WSS-M99P41-A72
- MS-13445 (FCA – Fiat Chrysler Automobiles)
- TL 52038 (Volkswagen Standard)
- GMW14573 (General Motors)
- TM-0030T-Y (Tesla)
- GS 97058 (BMW)
- MS 373-12 (Hyundai)
- DBL 8230 (Mercedes-Benz)
- TSM7508G (Toyota)
- Compliance with REACH, RoHS and IMDS
- ADR 2021 Regulations for the Transport of Dangerous Goods by Road, Rail and Inland Waterways (GGVSEB)
- CLP Regulation (Classification, Labelling and Packaging, Regulation (EC) No. 1272/2008)
- BS 5609 Resistance of Labels to Saltwater/Marine Exposure
- DIN EN ISO 11683:1997-11 Packaging – Tactile Warnings of Danger – Requirements
- FDA 175.105 Indirect Food Additives: Adhesives and Components of Coatings



Managing Partners Daniel Sugg and Simon Reuter



Our Moldengraben Site Combines Administration and Production

You're in Good Hands with robos-labels:

Robos-labels employs approximately 75 people. The company is headquartered near Stuttgart, Germany, where administration and production have been brought together in a modern facility since early 2018.

Founded in 1960, robos-labels now operates more than 20 modern printing and converting machines. In addition to conventional printing technologies such as screen and flexographic printing, we primarily use advanced digital printing

processes. Our production capabilities also include a fully automated video inspection system, a booklet production line and laser die-cutting technology.

In recent years, robos-labels has specialized in the production of high-performance labels for the technical and chemical industries, as well as for the automotive and medical technology sectors, supplying customers in more than 30 countries.



All Benefits at a Glance

Specialized in UL-Certified Labels for the North American Market

- Robos-labels has been a manufacturer of UL-certified labels since 1993 and is authorized to print all types of UL certification marks on labels (see Authorized Label Supplier Program, PGAA)
- UL is a globally recognized certification and testing organization whose requirements and testing procedures focus on product safety and integrity
- Our labels meet the requirements of UL 969 "Standard for Marking and Labeling Systems" as well as CSA 22.2
- UL-certified labels are available with variable data printing and a wide range of colors
- Robos-labels holds more than 20 of its own UL approvals for indoor and outdoor applications, helping customers avoid time-consuming and costly new certification processes

Your Experienced Partner for Customized Labeling Solutions with Special Requirements

- 3M-Certified Converter
- Listed in the International Material Data System (IMDS)
- EDI connectivity available
- Certified to ISO 9001:2015 since 1996 and ISO 14001:2015 since 2009
- A-rated supplier to numerous renowned industrial companies
- A wide range of labeling solutions from a single source
- Available on rolls or sheets, as well as with easy-release features such as pull tabs or back slits

Our quotation team will be happy to provide you with free, no-obligation label and material samples.

Email: request@robos-labels.com



**Zertifizierter Verarbeiter
Kennzeichnungsprodukte**

