

A PRACTICAL GUIDE TO

Professional label printing



www.chemius.net



No need to reinvent the wheel!

Check out our step-by-step process that we've developed over almost three decades in the **chemical industry** and hundreds of implementations.

It guarantees a **quick** and **cost-effective** solution for all your large-scale printing needs. Perfect for anyone involved in industrial label printing – chemical distributors, producers, and businesses of all sizes.

So, what exactly is professional labeling system?

It's when you print lots of labels on demand in the warehouse, using thermotransfer printers and professional printing software connected to an ERP system or a specialized tool like Chemius.

In this guide, we'll focus on printing labels for chemicals. These labels can be pretty complex because they include up to 6 pictograms that can vary in size and number.



IMAGE SOURCE:
[HTTPS://WWW.CAB.DE/EN/MARKETING/LABEL-PRINTER/XC6/](https://www.cab.de/en/marketing/label-printer/Xc6/)



Let's go!

To begin, it's crucial to design your labels from the inside out.

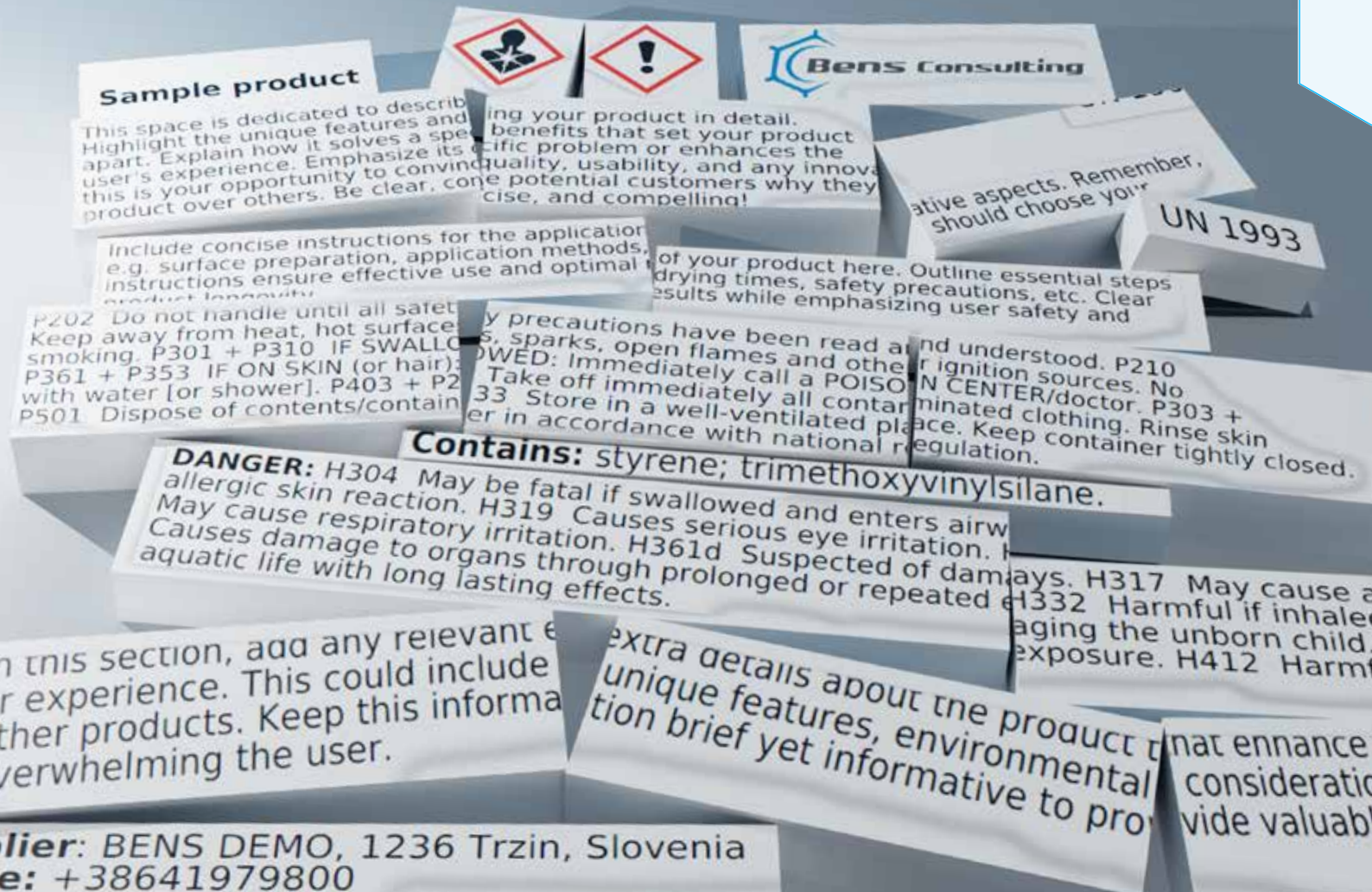
This means including all mandatory label elements and adhering to dimension requirements. Everything else should be tailored to accommodate the content.

Here's the breakdown of the steps:

1. Define the necessary label elements.
2. Determine the appropriate label size.
3. Choose the hardware.
4. Select the software.
5. Dos & don'ts

Label elements

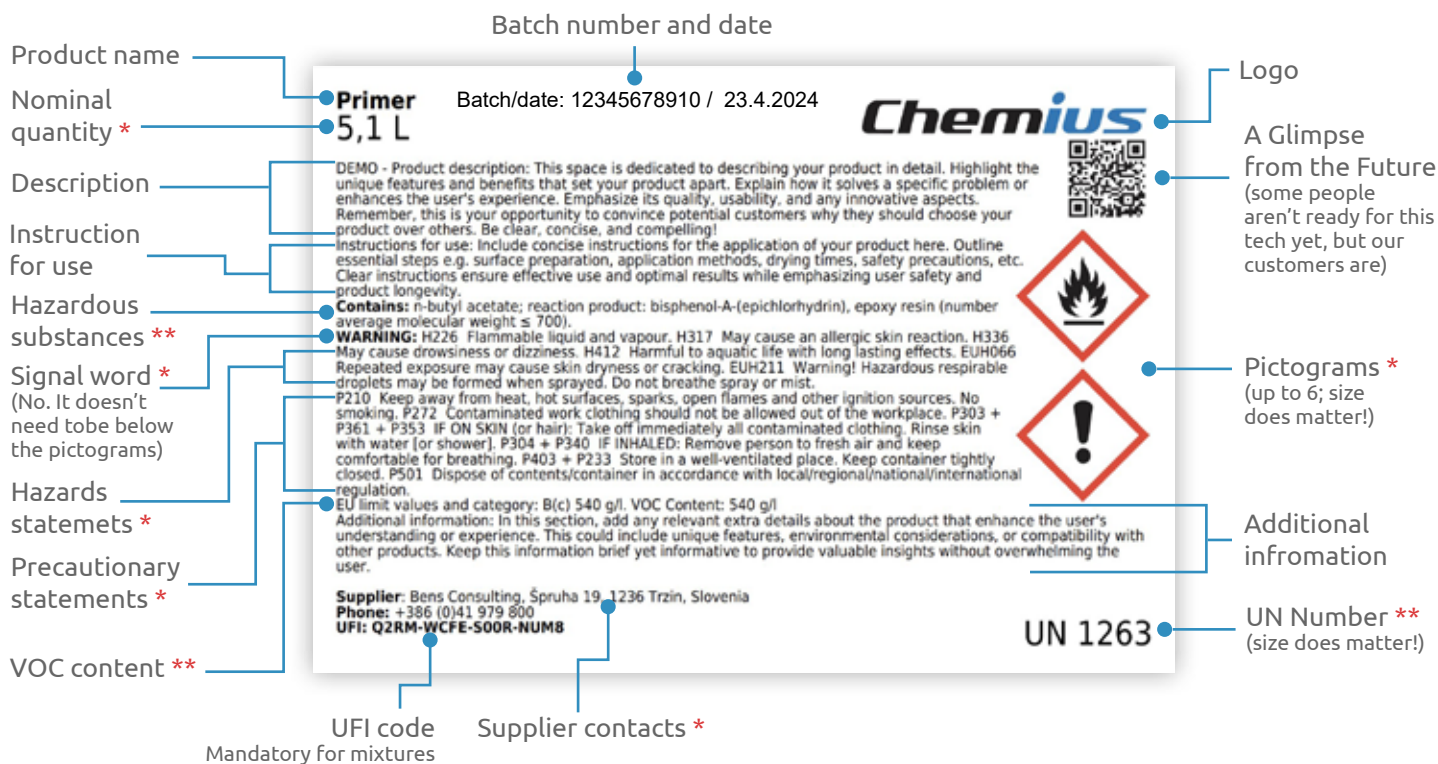
1



Define label elements

Think about what you want to include on the label. Usually, you'd want to have all the necessary stuff (check CLP/GHS), plus some extra text like product description, usage instructions, storage info, application details, etc.

Here's an idea of what to include on the label:



* Mandatory

** Mandatory if applicable

Determine the max number of pictograms

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP]



Signal word: **DANGER**

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H340 May cause genetic defects.

**CHECK SECTION
2 OF ALL YOUR
SAFETY
DATA SHEETS!**

In this step, you'll want to find the chemical in your portfolio that has the most pictograms.

Usually, chemicals have around 3-4 pictograms, but there could be some cases where you'll find up to 5 pictograms. And, well, if you're really unlucky, you might stumble upon a chemical with 6 pictograms.

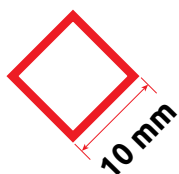
To figure out the number of pictograms, **just check section 2 of safety data sheets (SDS)**, and make a list of chemicals along with the corresponding number of pictograms.

This can be a bit challenging and time-consuming if you've got hundreds of SDSs in PDF. But if you use Chemius, you can analyze your entire portfolio in just a couple of seconds - even if it's tens of thousands of chemicals.

Define the size of pictograms



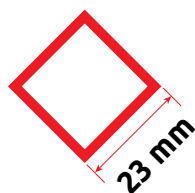
< 3 L



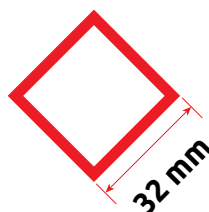
*Not smaller than 10 mm!
If possible, at least 16 mm!



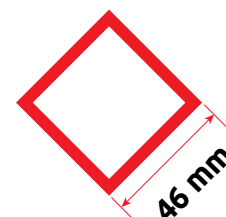
3 L - 50 L



50 L - 500 L



> 500 L



The size of **each** pictogram depends on the size of the packaging unit.

Generally, the length of a side of the pictogram determines its size. We're talking a minimum of 10 mm and a maximum of 46 mm. Sure, you can go bigger, but why waste precious label space if you don't have to?

Did you know...

With Chemius, analyzing your entire portfolio of chemicals or selected chemicals is a breeze, even if you have tens of thousands.

To enhance professional label printing, we've incorporated a feature that streamlines the preparation of all necessary data for portfolio analysis and connection to label printing software.

This enables you to expedite the setup of your large-scale label printing operations like never before.

EXPORT TO
NICELABEL



Group action



Share Products

Share product(s) outside of platform



Add to formulation

Create a new formulation with selected products or add the...



Create transport document (ADR)

Create a new transport document including selected...



Export to NiceLabel

Export selected products to Excel sheet to use it with...



Delete Products

This will delete the selected products if you have edit righ...



To Report

Report selected products to different authorities

Pro Tip #1

For the amount of mandatory text, check section 2.2 - Label elements - in the Safety Data Sheet with the most pictograms.

The number of pictograms usually correlates with the amount of H and P statements on the label.

Pro tip #2

Mind the special types of chemicals where additional information is mandatory, like:

- biocides
- plant protection products
- detergents
- paints and coatings
- etc.

Text (character) size

Text



Primer
5,1 L

Batch/date: 12345678910 / 23.4.2024

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DEMO - Product description: This space is dedicated to describing your product in detail. Highlight the unique features and benefits that set your product apart. Explain how it solves a specific problem or enhances the user's experience. Emphasize its quality, usability, and any innovative aspects. Remember, this is your opportunity to convince potential customers why they should choose your product over others. Be clear, concise, and compelling.

Instructions for use: Include concise instructions for the application of your product here. Outline essential steps e.g. surface preparation, application methods, drying times, safety precautions, etc. Clear instructions ensure effective use and optimal results while emphasizing user safety and product longevity.

Contains: n-butyl acetate; reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 70)

WARNING: H226 Flammable liquid and vapour. H317 May cause an allergic skin reaction. H336 May cause drowsiness or dizziness. H412 Harmful to aquatic life with long lasting effects. EUH066 Repeated exposure may cause skin dryness or cracking. EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.




P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P272 Contaminated work clothing should not be allowed out of the workplace. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

EU limit values and category: B(c) 540 g/l. VOC Content: 540 g/l

Additional information: In this section, add any relevant extra details about the product that enhance the user's understanding or experience. This could include unique features, environmental considerations, or compatibility with other products. Keep this information brief yet informative to provide valuable insights without overwhelming the user.


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Phone: +386 (0)41 979 800
UFI: Q2RM-WCFE-S00R-NUM8

UN 1263

Legibility Standard

When it comes to text size, the regulations only focus on “readability” and not “legibility”. Currently (January 2024), there are no specific requirements for character size. However, legibility is determined by technical standard DIN 1450, which considers factors like character size, contrast, print quality, and spacing.

Text  **1.8 mm**

As a general guideline, we recommend using a font size of 7 pt (Arial) since it meets the legibility criteria, with a minimum height of 1.8 mm for the letter “h”. For smaller packaging (e.g., below 125 ml), you can use a smaller font size, but we suggest a minimum of 5 pt (Arial).

2

Label size?

Acetone

1 L

DANGER: H225 Highly flammable liquid and vapor. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. P201+P202 Before use, read all labels and instructions. P231 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P243 Take action to prevent static discharges. P280 Wear protective gloves/protective clothing/eye protection/face protection. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water (or shower). P304+P340 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P403+P233 Store in a well-ventilated place. Keep lock.

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Zinc Oxide (ZnO)

200 g

WARNING: H410 Very toxic to aquatic life with long lasting effects. P273 Avoid release to the environment. P501 Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

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Phone: +386 (0)41 979 800

Chelating agent

5 L

Contains: tetrasodium ethylene diamine tetracetate.
DANGER: H290 May be corrosive to metals. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H332 Harmful if inhaled. H373 May cause damage to organs through prolonged or repeated exposure.
P201+P202 Before use, read all labels and instructions.
P231 Keep only in original packaging. P260 Do not breathe dust/fume/gas/mist/vapours/spray. P280 Wear protective gloves/protective clothing/eye protection/face protection. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water (or shower). P304+P340 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor/physician. P390 Absorb/containment with local/national/international regulation.
P403 Store locked up. P501 Dispose of contents/container in accordance with local/national/international regulation.

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Phone: +386 (0)41 979 800
UFI: AWQM-WC2N-5005-AS64

Primer

2,5 L

EN: Contains:
WARNING: H225 Highly flammable liquid and vapor. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. P201+P202 Before use, read all labels and instructions. P231 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P243 Take action to prevent static discharges. P280 Wear protective gloves/protective clothing/eye protection/face protection. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water (or shower). P304+P340 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P403+P233 Store in a well-ventilated place. Keep lock.

DE: Enthält:
ACHTUNG: H225 sehr entzündlich. H319 Verursacht schwere Augenirritation. H336 Kann Schläfrigkeit oder Schwindel verursachen. P201+P202 Vor Gebrauch alle Etiketten und Anweisungen lesen. P231 Von Hitze, heißen Oberflächen, Funken, offenem Feuer und anderen Zündquellen fernhalten. Nicht rauchen. P243 Vor elektrostatischen Entladungen Vorkehrungen treffen. P280 Schutzhandschuhe, Schutzhose/-kleidung, Schutzbrille/-schutzvisier, Atemschutz tragen. P303+P361+P353 Bei Kontakt mit der Haut (oder den Haaren): Alle kontaminierten Kleidungsstücke sofort ausziehen. Haut mit Wasser (oder Dusche) abwaschen. P304+P340 Bei Augenkontakt: Vorsichtig mit Wasser abspülen. Kontaktlinsen, falls vorhanden und leicht zu entfernen, entfernen. Weiter spülen. P310 Sofort einen Arzt (oder einen Giftinformationsdienst) anrufen. P390 Freisetzung verhindern. Entsorgung nach lokaler/nationaler/internationaler Vorschrift.

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UFI: Q2RM-W

Chemius

glycidyl ether, oligomeric, C10-16

DANGER: H225 Highly flammable liquid and vapor. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. P201+P202 Before use, read all labels and instructions. P231 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P243 Take action to prevent static discharges. P280 Wear protective gloves/protective clothing/eye protection/face protection. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water (or shower). P304+P340 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P403+P233 Store in a well-ventilated place. Keep lock.

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Phone: +386 (0)41 979 800
UFI: Q2RM-W

Industrial cleaner

5,1 L

EN: Contains: triisobutylaluminum chloride, tertiary amine compounds, decyl octyl glycolides.
DANGER: H225 Highly flammable liquid and vapor. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H332 Harmful if inhaled. H373 May cause damage to organs through prolonged or repeated exposure.
P201+P202 Before use, read all labels and instructions.
P231 Keep only in original packaging. P260 Do not breathe dust/fume/gas/mist/vapours/spray. P280 Wear protective gloves/protective clothing/eye protection/face protection. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water (or shower). P304+P340 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor/physician. P390 Absorb/containment with local/national/international regulation.
P403 Store locked up. P501 Dispose of contents/container in accordance with local/national/international regulation.

ES: Contiene: cloruro de bis(isobutil)aluminio, compuestos de aminas terciarias, glicolatos de octilo y decilo.
PELIGRO: H225 Líquido y vapores muy inflamables. H302 Nocivo en caso de ingestión. H314 Provoca quemaduras graves en la piel y lesiones oculares graves. H332 Puede causar daño a los órganos a través de la inhalación o exposición repetida o prolongada.
P201+P202 Antes de usar, leer todos los etiquetados y las instrucciones.
P231 Mantener solo en el envase original. P260 No respirar polvo/neblina/gas/vapor/aerosol/espray. P280 Usar guantes protectores, ropa protectora, protección ocular y protección facial. P303+P361+P353 En caso de contacto con la piel (o los ojos): Quitar inmediatamente toda la ropa contaminada. Enjuagar la piel con agua (o ducha) abundantemente. P304+P340 En caso de contacto con los ojos: Enjuagar con agua (o ducha) abundantemente. P310 Llamar inmediatamente a un centro de toxicología o a un médico. P390 Evitar la liberación al medio ambiente. P501 Eliminar el contenido del recipiente de acuerdo a las regulaciones nacionales.

Supplier / Proveedor: Bem Consulting, Senja 19, 1236 Trzin, Slovenia / Eslovenia
Phone / Tel.: +386 (0)41 979 800
UFI: J2VM-SC2V-7905-236E

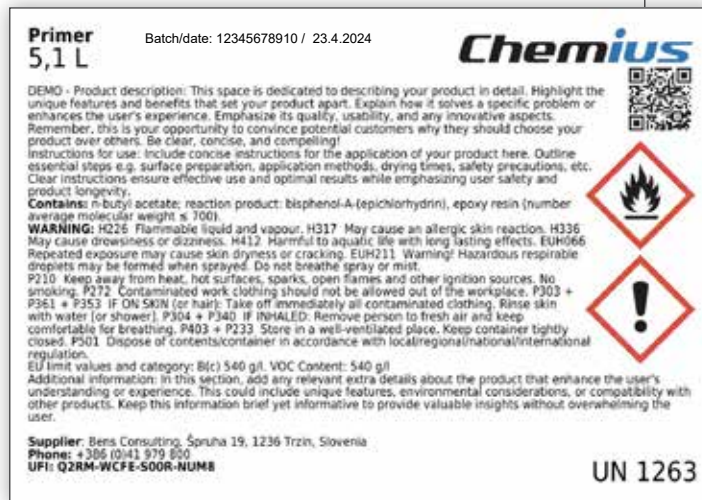
Ethyl acetate

200 L

EN:
DANGER: H225 Highly flammable liquid and vapor. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. P201+P202 Before use, read all labels and instructions. P231 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P243 Take action to prevent static discharges. P280 Wear protective gloves/protective clothing/eye protection/face protection. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water (or shower). P304+P340 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P403+P233 Store in a well-ventilated place. Keep lock.

ES:
PELIGRO: H225 Líquido y vapores muy inflamables. H319 Verursacht schwere Augenirritation. H336 Kann Schläfrigkeit oder Schwindel verursachen. P201+P202 Vor Gebrauch alle Etiketten und Anweisungen lesen. P231 Von Hitze, heißen Oberflächen, Funken, offenem Feuer und anderen Zündquellen fernhalten. Nicht rauchen. P243 Vor elektrostatischen Entladungen Vorkehrungen treffen. P280 Schutzhandschuhe, Schutzhose/-kleidung, Schutzbrille/-schutzvisier, Atemschutz tragen. P303+P361+P353 Bei Kontakt mit der Haut (oder den Haaren): Alle kontaminierten Kleidungsstücke sofort ausziehen. Haut mit Wasser (oder Dusche) abwaschen. P304+P340 Bei Augenkontakt: Vorsichtig mit Wasser abspülen. Kontaktlinsen, falls vorhanden und leicht zu entfernen, entfernen. Weiter spülen. P310 Sofort einen Arzt (oder einen Giftinformationsdienst) anrufen. P390 Freisetzung verhindern. Entsorgung nach lokaler/nationaler/internationaler Vorschrift.

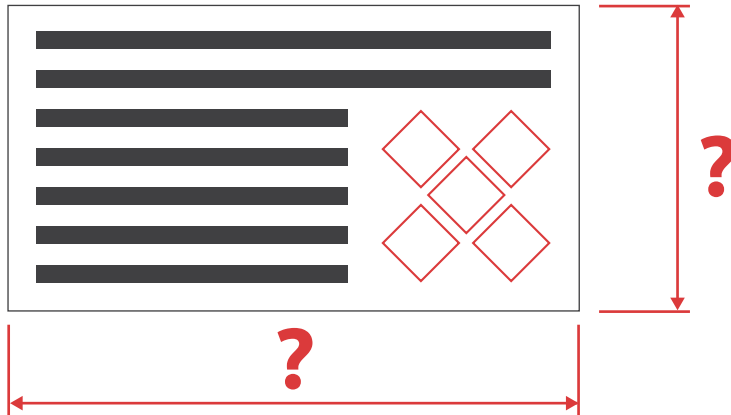
Minimize the number of label sizes



If you're aiming for maximum efficiency (and cost-effectiveness), it's best to stick with one label size for all your packaging.

Why? Well, you don't want your operators to keep switching label stock every time they print a different label. To keep things running smoothly, go for a **one-size-fits-all** approach. And if that's not doable, try to minimize the number of different label sizes you use.

Determine the optimal label size



The size of the label depends on a few factors:

- The available area on the packaging unit.
- The number of pictograms – this one's the trickiest.
- The size of pictograms.
- The amount of elements and text on the label.

But in the end, it all boils down to the number and size of the pictograms. They really have the most impact on your label.

Just remember: you can use bigger labels with larger pictograms on small packaging, but you can't use smaller-than-required pictograms on big packaging.

Define label sizes



Gather all the possible packaging units and measure the available area for the label on each one. The goal is to find a label size that fits all your packaging units or use as few label sizes as possible.

Just keep in mind:

- Changing label stock for different labels during the printing process can be quite time-consuming!
- The more different labels you have, the more it will cost for labels and printing.



Next up, you gotta pick the hardware.

Which printer should you choose?

Well, here are a few things to consider:

- Printing width
- Printing color

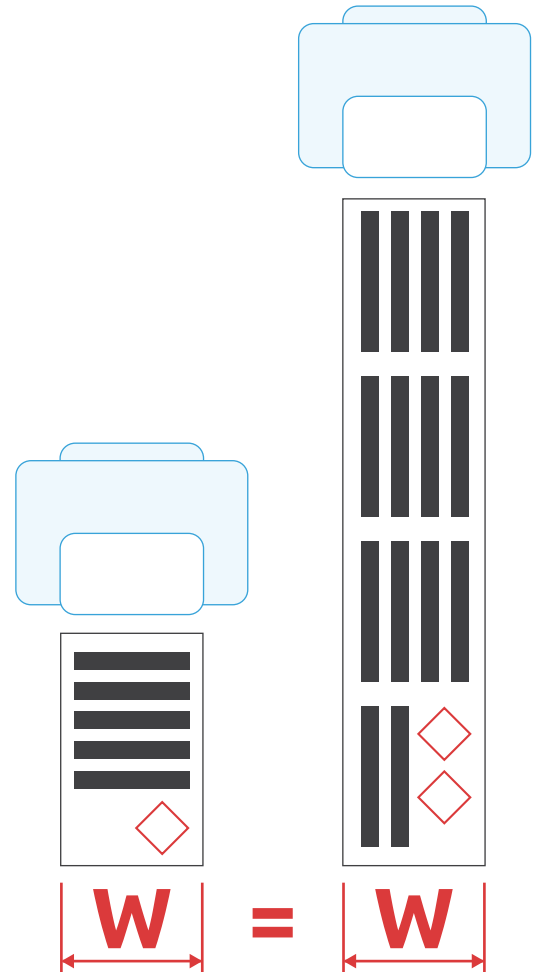
Printing width

When choosing a printer for your labels, it's important to make sure it's compatible with the size you need, especially the width.

Just remember, printers with wider printing areas tend to be pricier.

Professional label printers have limited width for printing, but the length is not an issue since they're designed for roll labels. This means you can print wider labels by changing their orientation. It's a handy feature when printing labels for drums or bigger cylindrical cans, like paint cans.

Oh, and don't forget to consider the available area on the different packaging units you defined earlier. Keep that in mind!



Printing color

When it comes to professional, large-scale printers, they usually use black ribbon for label printing. However, there are some models that support 2-color printing, with black and red options.

Sure, black-only printers are cheaper, but the ones with two colors offer more flexibility:



Pros

- Cheaper than 2-color printers

Cons

- You need to pre-print red frames for pictograms.
- Printer calibration is necessary when changing stock labels to align pictograms with pre-printed frames.



Pros

- Pre-printing red frames for pictograms is NOT required.
- Printer calibration is NOT necessary when changing stock labels to align pictograms with pre-printed frames.



Cons

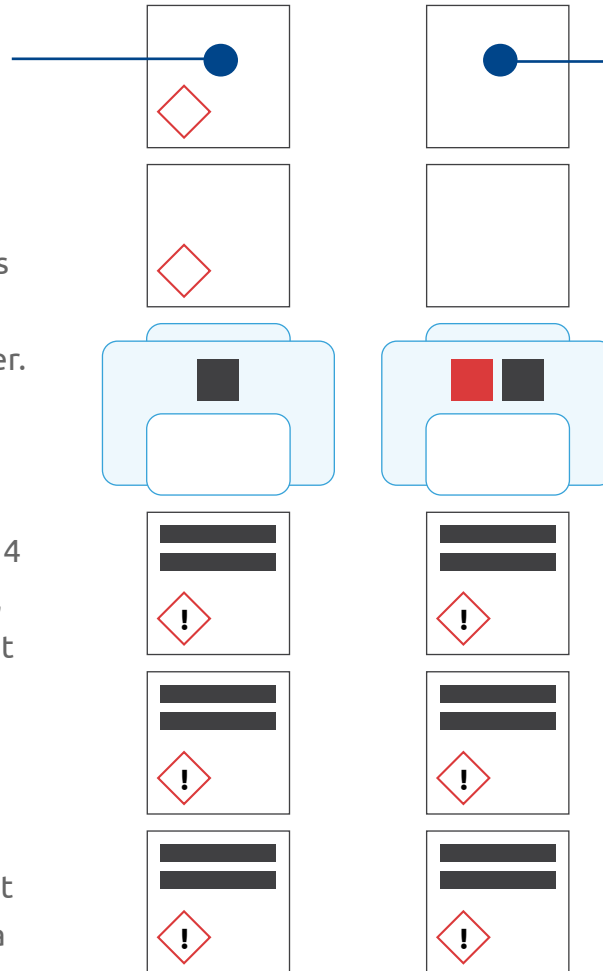
- Price

Price vs. flexibility

If you can only print in black, you have to pre-print red frames for pictograms and carefully fit the black part into those frames by adjusting and calibrating your printer. It can be quite time-consuming.

And if you need up to 4 pictograms on a label, you'll have to pre-print 4 red frames on the label stock.

Oh, and what if you suddenly need to print 5 or 6 pictograms on a label?



So, yes, 2-color printers are pricier, but they offer more flexibility. No need to pre-print red frames or adjust your printer.

The software?

4



Professional labeling software

You'll want some professional labeling software that can handle:

- creating different label templates and
- connecting them to external data sources.

This way, you can easily map data with the fields on your template and automate the label creation and printing process.

So far, we have tested Loftware's NiceLabel (minimum: Designer Pro) or Bartender (minimum: Professional). Both support everything you need for automating large-scale label printing.



Visit:

<https://www.loftware.com/>
NiceLabel is a trademark of Loftware Inc.



Visit:

<https://www.seagullscientific.com/>
BarTender is a trademark of Seagull Scientific, LLC.

One common mistake...

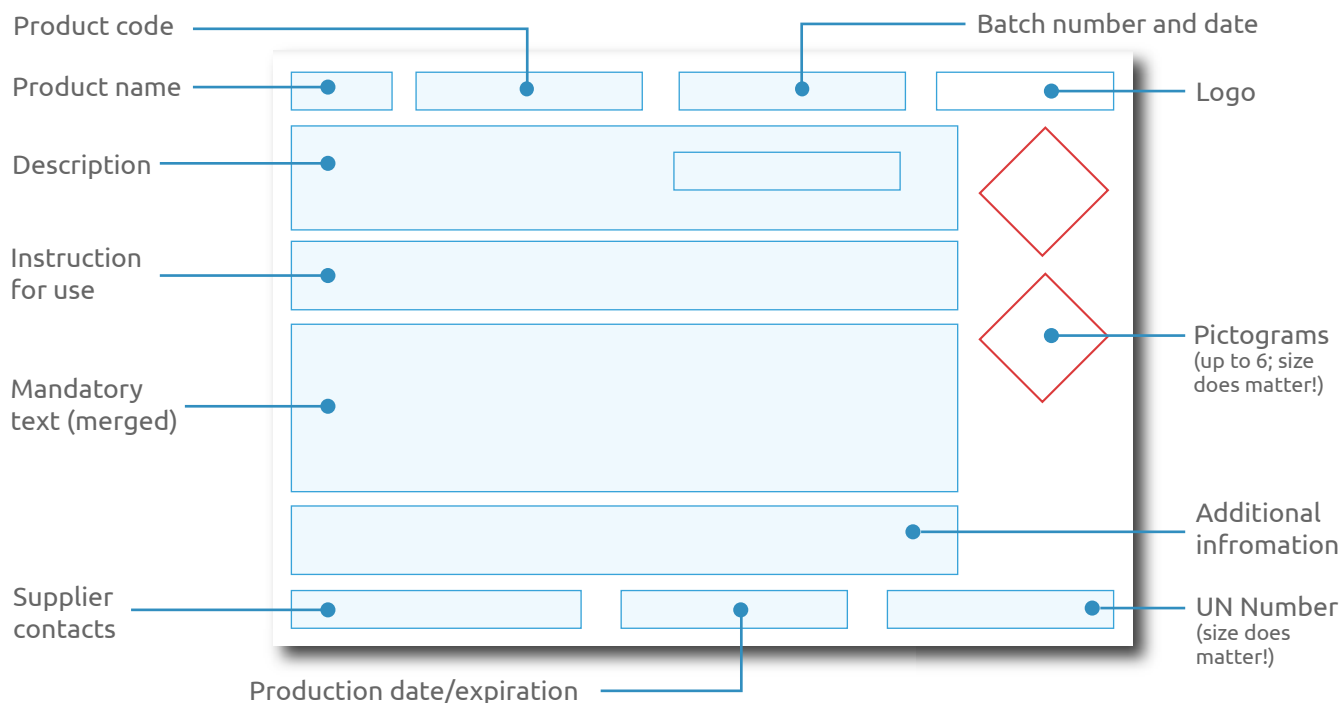
... we often see is companies using the right software but in the wrong way. Instead of creating templates and connecting them to the data source, they manually create and maintain labels.

This means they have to manually update labels whenever safety data sheets change. Not only is this incredibly time-consuming, but it also increases the chances of non-compliant labels.

Create a label template

Once you've determined which software best meets your needs, you're ready to embark on the creation of label templates. This task shouldn't pose much difficulty as you've already defined all the label elements in previous steps.

Begin by linking the label to the data source, and then craft a template that aligns with your vision. It's somewhat akin to utilizing the mail-merge feature in Microsoft Office, where you establish a connection between an Excel file and a Word form.



For Maximum Efficiency

In Chemius, you have multiple options at your disposal.

As a standard feature, you can effortlessly export your labeling data into a ready-to-use Excel file and seamlessly integrate it with your template. This way, you don't have to worry about the label content because we've got you covered.

If you prefer a direct connection to the database, simply let us know, and we'll gladly assist you in setting up automation.

And guess what? We also offer a collection of ready-to-use, battle-proven label templates for NiceLabel. So, setting up your labeling automation will be a breeze.



Software
NiceLabel



IMAGE SOURCE:
[HTTPS://WWW.CAB.DE/EN/
MARKETING/LABEL-PRINTER/XCQ/](https://www.cab.de/en/marketing/label-printer/xcq/)

Dos & don'ts

DO

try to find a label size that fits all your packaging units.



SAFETY DATA SHEET ACCORDING TO REGULATION (EC) 1907/2006

U.S. Product Identifier:
Product name:
Private:
100%
© 2004-2005

4.2. Supplementary Information

Statement identified:
Prison.

1. *Journal of Management Education*, 27(1), 10-20.

Supplier:
Barnes Consulting
Spartan NY
12156 Tarry, New
+ 1800 274-1179
barnes@barnes.com

Journal of Management Inquiry 18(4)

100% Satisfaction
Guaranteed
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4.3 Classification

continued

Labeling error

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H212 Flammable liquid and vapor.
H272 May cause an allergic skin reaction.
H316 May cause drowsiness or dizziness.
H412 harmful to aquatic life with long lasting effects.
EUH063 Repeated exposure may cause skin dryness or cracking.
H314 Very Irritating: Causes severe skin irritation and may cause burns when sprayed. Do not breathe spray or mist.
P101 Wearing Hazardous Waste Disposal Suit: Do not breathe spray or mist.
P102 Keep away from heat, fire, surface, sparks, open flames and other ignition sources. No smoking.
P121 Contaminated waste clothing should not be allowed out of the workplace.
P201 + P202 + P273 + P501 (GHS 09) (hazard) Take off immediately all contaminated clothing. Store with water (for shower).
P280 + P303 + P361 + P353 (GHS 05) (hazard) Remove personal protective equipment (PPE) immediately. Wash thoroughly before reuse.
P301 + P312 (GHS 07) (hazard) If swallowed: Rinse mouth. Do not induce vomiting. Seek medical advice (show label).

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Journal of Internal Medicine 255: 103–110

reactive product). *Streptococcus* & *Staphylococcus* species react differently. Average incubation

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The substance does not contain any component considered to be either persistent, bioaccumulative and/or toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

[illegible]

doi:10.1017/S002229241000050

SECTION 3. COMPOSITION INFORMATION ON INGREDIENTS

4. 6. 2014

For instance, see 8.1

6.2 Infrastructure

Spalte	Land (ISO 3166-1)	Währung	Währungssymbol	Währungseinheit	Währungseinheit
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
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44	44	44	44	44	44
45	45	45	45	45	45
46	46	46	46	46	46
47	47	47	47	47	47
48	48	48	48	48	48
49	49	49	49	49	49
50	50	50	50	50	50
51	51	51	51	51	51
52	52	52	52	52	52
53	53	53	53	53	53
54	54	54	54	54	54
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56	56	56	56	56	56
57	57	57	57	57	57
58	58	58	58	58	58
59	59	59	59	59	59
60	60	60	60	60	60
61	61	61	61	61	61
62	62	62	62	62	62
63	63	63	63	63	63
64	64	64	64	64	64
65	65	65	65	65	65
66	66	66	66	66	66
67	67	67	67	67	67
68	68	68	68	68	68
69	69	69	69	69	69
70	70	70	70	70	70
71	71	71	71	71	71
72	72	72	72	72	72
73	73	73	73	73	73
74	74	74	74	74	74
75	75	75	75	75	75
76	76	76	76	76	76
77	77	77	77	77	77
78	78	78	78	78	78
79	79	79	79	79	79
80	80	80	80	80	80
81	81	81	81	81	81
82	82	82	82	82	82
83	83	83	83	83	83
84	84	84	84	84	84
85	85	85	85	85	



DO

black-out excess
pre-printed frames!

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Don't

print Safety Data Sheets!



Scan

the QR code to get the latest
Safety Data Sheet on your
mobile device!



Don't

make black-and-white pictograms.



DO

GHS/CLP Pictograms must be black with a red frame.



Don't

print fewer pictograms than required!
Ensure the label always aligns with the
Safety Data Sheet!



SAFETY DATA SHEET ACCORDING TO REGULATION (EC) 1907/2006

Chemius

Product name: **Chelating agent**
in date: 15.04.2024, Revision: 16.04.2024, version: 1.0

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier:
Product name:
Chelating agent
UFI:
AWQAWCIN-0005-ASFA

1.2 Relevant identification
Relevant identification:
Chelating agent
Uses advised if any:
No information

1.3 Details of the Supplier
Bent Consult
Bakarska ul.
1241 Kamnik
+386 (0)1 562
slojkaemka

1.4 Emergency
Emergency:
112
Supplier:
+386 (0)1 562

SECTION 2: HAZARD

2.1 Classification
Classification:
Met. Cor.,
Acute Tox.
Skin Cor.,
Eye Cor.,
Acute Tox.
STOT RE 2

2.2 Labeling
Labeling:

Signal word: DANGER

H290 May be corrosive to metals.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H332 Harmful if inhaled.
H373 May cause damage to organs through prolonged or repeated exposure.
P234 Keep only in original packaging.
P260 Do not breathe dust/fume/gas/mist/vapour/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P310 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water (or shower).
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/physician.
P390 Advise to spillage to prevent material damage.
P403 Store locked up.
P501 Dispose of contents/container in accordance with local/national/international regulations.

Contents:
tetrasodium ethylene diamine tetraacetate

2.3 Other hazards
PBT/PvPvB:
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (PvPvB) at levels of 0.1% or higher.

Endocrine disrupting properties
The mixture does not contain substances that are included in the list of substances with endocrine disrupting properties established in accordance with Article 59 of the REACH Regulation, in a concentration ≥ 0.1 w/w %. The mixture does not contain substances identified as substances with endocrine disrupting properties according to the criteria of Commission Delegated Regulation (EU) 2017/1100 or Commission Regulation (EU) 2014/495, in a concentration ≥ 0.1 w/w %.

Additional information
No information.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
For mixtures see 3.2.

3.2 Mixtures

Name	CAS EC Index Reach	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	Specific Concentration Limits	Notes for substances
tetrasodium ethylene diamine tetraacetate	44-62-4 206-573-6 607-438-00-2 61-211-8801/20-27	30-40	Acute Tox. 1, H302 Env. Harm. 3, H319 Acute Tox. 4, H332 12019 RE 2, H373	2	1
trisodium ethylenediamine	5064-24-3 219-166-6 607-420-00-0	1-5	Acute Tox. 4, H302 Env. Harm. 3, H319 Car. 2, H351	Env. 2, H351, 0.2-5%	1



Don't

Pictogram frames overlapping!



DO

No overlapping!



Don't

make pictograms too small.



DO

Mind the size of the pictograms!



Don't

offset overprinted text and pictograms.
This can happen when the pre-printed labels are not correctly aligned with the overprinted elements.



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Chelating agent
5 L

EN: Contains: tetrasodium ethylene diamine tetraacetate. **DANGER:** H290. May be corrosive to metals. H302. Harmful if swallowed. H314. Causes severe skin burns and eye damage. H332. Harmful if inhaled. H373. May cause damage to organs through prolonged or repeated exposure.

P234. Keep only in original packaging. P260. Do not breathe dust/fume/gas/mist/vapours/spray. P280. Wear protective gloves/protective clothing/eye protection/face protection. P303 + P331. IF SWALLOWED: rinse mouth. P304 + P340. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P340. IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305 + P351 + P338. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician if you feel unwell. P405. Store locked up. P501. Dispose of contents/container in accordance with local/national regulations.

Supplier: Bens Consulting, Špruha 19, 1236 Trzin, Slovenia
Phone: +386 (0)41 979 800
UFI: AWQM-WC2N-5005-A5F4

Chelating agent
5 L

Contains: tetrasodium ethylene diamine tetraacetate.

DANGER: H290. May be corrosive to metals. H302. Harmful if swallowed. H314. Causes severe skin burns and eye damage. H332. Harmful if inhaled. H373. May cause damage to organs through prolonged or repeated exposure.

Keep only in original packaging. P260. Do not breathe dust/fume/gas/mist/vapours/spray. P280. Wear protective gloves/protective clothing/eye protection/face protection. P301 + P311. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P303 + P361 + P353. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water (or shower). P304 + P340. IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305 + P351 + P338. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310. Immediately call a POISON CENTER or doctor/physician. P390. Absorb spillage to prevent material damage. P405. Store locked up. P501. Dispose of contents/container in accordance with local/national/international regulation.

Supplier: Bens Consulting, Špruha 19, 1236 Trzin, Slovenia
Phone: +386 (0)41 979 800
UFI: AWQM-WC2N-5005-A5F4

Don't

use low-quality labels!

Labels must be firmly affixed to the packaging to prevent peeling.

The label material must be durable and adhere well to the packaging.





Summary

Here's a quick summary for developing an efficient automated labeling system:

1. Define label sizes
2. Pick the right hardware
3. Choose the right software
4. Create templates and link them to labeling data source

Remember:

- Content of the label
- Text size
- Suitable label materials and adhesives for your specific application



The End

We hope you've found this guide helpful in establishing your professional safety label printing system swiftly.

Should you have any further inquiries, we're just a message away.

Remember, Chemius is your go-to solution for seamless chemical management and label printing operations.

Here's to achieving compliance with ease and experiencing the least amount of friction and frustration in label printing.

Wishing you all the best!

Chemius
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