#### **COVER STORY**

# **Online Hazmat** Alobot Manager Training

COMPLIANCE WITH CONVENIENCE

TRAINING COMPLETE

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**PG 6 INTEGRATED DG SOFTWARE** 

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DG SYMPOSIUM: MAKE IT A MISSION

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#### Welcome to the 8th issue of the **Dangerous Goods Report**

Dangerous Goods compliance isn't just about choosing the right labels, placards and packaging. It's also about making sure everyone on your team has the training to make those choices correctly.

This issue of the Dangerous Goods Report looks at the often stress-inducing process of ensuring hazmat training compliance, and the pros and cons of online training solutions. We also examine the benefits of integrating DG software with your ERP system, and take a look at a new packaging technology that may soon revolutionize how lithium batteries are shipped. After a preview of next September's Dangerous Goods Symposium, you'll have a chance to test your label compliance acumen.

As always, we at Labelmaster are here to help you make sense of the ever-changing Dangerous Goods landscape. We hope you find the information and solutions in the Dangerous Goods Report to be useful, and we welcome any questions.



Alan Schoen President of Labelmaster

**ONLINE RESOURCES** 



#### **GET CONNECTED**

For more information on handling lithium batteries throughout your DG supply chain, visit labelmaster.com/ lithium-battery-shipping.



#### STAY INFORMED The world of DG is constantly changing. To find updates on a wide range of DG topics, including lithium battery shipping, visit labelmaster.com/blog.



#### HEAR FROM OUR EXPERTS

The Master Series is a collection of short videos that provides practical perspectives on current DG issues. For more, visit labelmaster.com/masterseries.



#### MAINTAIN COMPLIANCE

From advanced shipping software to logistics consulting, Labelmaster Services can help keep your business on the right side of DG regulations. Visit labelmaster.com/services to learn more.

This Dangerous Goods Report is designed to provide accurate information regarding the subject matter covered. Every effort has been made to provide a simplified guide consistent with the various applicable regulations. However, if there is a discrepancy, the regulations are the final authority.

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T A MISSION: 17 DANGEROUS GOODS SIUM? 't need a full tank of gas, ck of cigarettes or glasses.
D YOU SPOT COMPLIANT T LABEL? rences may be hard , but DOT inspectors n them
and resources to keep your us Goods compliant and safe



## ONLINE HAZMAT TRAINING Compliance with Convenience "Let me see your training records."

Many DOT and OSHA inspections start with those very words. For organizations that ship hazardous materials, that sentence can be the prelude to a relatively painless inspection—or the beginning of a very long day.

No Dangerous Goods professional will deny that a welltrained workforce is essential to the safe and compliant transport of hazardous materials. Yet many organizations find it difficult to comply in full with the training regulations defined by the 49 CFR.

Assuring the competency and safety of their employees with fully compliant training is an ongoing challenge for nearly every Dangerous Goods shipper. In fact, a recent Labelmaster survey revealed that **47% of DG trainers and managers do not agree that their employees are properly trained.** 

Fortunately, technology has made that challenge somewhat more manageable.

## THE CHALLENGES OF HAZMAT TRAINING

49 CFR Part 172.704 requires any employee who works with hazardous materials to undertake—and be tested on—as many as five different types of training:

- 1. General awareness/familiarization training
- 2. Function-specific training
- 3. Safety training
- 4. Security awareness training
- 5. In-depth security training

Those requirements alone can be challenging, **but training compliance is a constantly moving target.** The requirement for function-specific training can require an employee to undergo new training whenever he or she assumes a new role—shipping lithium batteries, for instance—in an organization.

COVER STORY Plus, training isn't a "one-and-done." Even if an employee's responsibilities never change, 49 CFR requires the employee to renew his or her training at least once every three years.

Labelmaster Senior Consultant Alicia Saenz adds, "Some companies have high turnover or temporary employees around the holidays, and they don't realize those are hazmat employees who need to be trained."

Take those dynamic requirements, multiply them by all the locations and subsidiaries a company might have, and it's easy to see why coordinating training to stay compliant can be a perpetual challenge.

#### ONLINE MODULES MAKE TRAINING LESS CHALLENGING

Over the last decade or so, managers and DG trainers have embraced interactive online training as part of the solution to that perpetual challenge.

Whereas once trainers had to convene employees for several days to work through the material and conduct testing, now employees can train at their own pace, wherever they happen to be and whenever they have time. Most online modules are fully self-contained, including tests and certifications.

Online training saves time and money while boosting productivity. An employee can pause training to focus on work during busier periods, and resume the module when work slows down.

Still, some trainers say interacting with a screen is no substitute for getting your questions answered by a live trainer.

"We usually favor a blended solution," says Labelmaster Senior Manager Jim Shimko. "Employees with more complex roles need the depth of classroom training, while others do fine with online. Online works well for recurrent training, too, with a lot more flexibility."

Ultimately, of course, an online module is only as good as the people who create it.



#### LABELMASTER HAZMAT TRAINING: CERTIFIED STRESS-FREE

Keeping hazmat employees compliantly trained, as noted above, can be stressful. Online modules relieve some of that stress, but a trainer or manager can't truly relax without complete confidence in the accuracy and accessibility of those modules.

### Unfortunately, nearly one-third of DG pros believe there are no training products on the market that meet their organizations' needs.

That's why Labelmaster, for the first time, is introducing its own online training modules, developed by the same experts who support Labelmaster customers every day. The first three modules offered are:

- GENERAL AWARENESS
- LITHIUM BATTERIES—EXCEPTED
- LITHIUM BATTERIES—FULLY REGULATED

These fully interactive modules—on their own, or combined with classroom training make the experience of keeping a hazmat workforce compliantly trained as stress-free as possible.

"I'm excited we can offer courses from the Labelmaster toolbox to meet our clients' needs," says Saenz. "A great online course, with good graphics and real interaction, helps people absorb the material better. They won't just be able to pass the test—they'll actually be able to do their jobs better."

Learn more about Labelmaster online hazmat training at **labelmaster.com/training** and see **page 15** for available online courses.

#### COMPETENCY-BASED TRAINING: A NEW CHALLENGE?

The next edition of the ICAO Technical Instructions (2019–2020) and the 60th edition of the IATA Dangerous Goods Regulations will include new Dangerous Goods training requirements based on the goals of competency-based training (CBT).

If you're not familiar with CBT, no need to lose any sleep. You have two years to get comfortable with the concept, and the shift shouldn't radically change the way anyone does business.

Labelmaster Senior Manager Jim Shimko adds, "CBT will give companies more effective validation of online training content."

The biggest difference is that CBT is focused on the training requirements related to an employee's actual responsibilities. While current training includes function-specific training, CBT requires the employer to verify that the employees have the knowledge and skills to perform their functions compliantly.

CBT identifies the key competencies that need to be achieved, determines the most effective way of achieving them, and establishes valid and reliable assessment tools to evaluate their achievement. Under the CBT approach, it is not sufficient to send employees to a class and have them successfully pass a test. There is a greater onus on the employer to ensure employees have the skills and knowledge to perform their designated functions.

The goal? A workforce that's more accurately trained to perform the tasks of transporting hazardous materials safely and compliantly.

Until 2019, CBT will be encouraged, but not mandatory. Questions? **Contact services@labelmaster.com.** 

## INTEGRATED DANGEROUS GOODS SOFTWARE

**DG Software + ERP = streamlined compliance** 

**Labelmaster's 2016 survey of Dangerous Goods shippers** revealed some uncomfortable doubts about companies' abilities to ship hazmat compliantly:



**believed** their shipping technology was not forward-thinking



did not believe their companies had the right technology in place

DG software should be standard for any organization that ships hazardous materials regularly. But, as these survey results show, just having software doesn't automatically inspire confidence. It needs to be the right software, with the right setup, both for now and the foreseeable future.

That's why more of today's shippers are exploring fully integrated DG software.

#### DG SOFTWARE IS ONLY PART OF THE SOLUTION

All but the smallest shippers now run their operations on enterprise resource planning (ERP) software. But many have been slower to adopt DG software, even as DG shipping has gotten more complicated.

DG software helps companies ship hazmat compliantly by classifying shipments, producing documentation, and directing correct packaging, labels and markings. Yet many shippers find that running DG software alongside their ERP systems adds extra steps to their shipping operations.

Without ERP integration, even the best DG software is a less-than-ideal solution.

"You might be getting the best output, but it's more work," says Labelmaster Vice President of Software & Services Forest Himmelfarb. "You have two separate sets of addresses, and you have to learn two different interfaces. There's a lot of wasted time and effort."

Some ERP systems do offer DG functionality, but Himmelfarb warns, "They're not very robust or sophisticated, and there's no guarantee that they're up to date on the latest regulations.

"For the most accurate, most streamlined operation, you want DG functionality fully integrated with your ERP."

#### ONE SYSTEM, ONE SOLUTION

When DG software is fully integrated into an ERP, they run like one system—because they **are** one system:



- Users work with one familiar interface.
- When DG functions are required, the system accesses them seamlessly.
- There's no wasted time or effort—data needs to be entered only once.
- Less data entry means errors can be reduced or eliminated.
- Training is simplified because there's only one interface to learn.

Plus, integrated DG software updates regulations and tables automatically, so the ERP stays current and keeps shipments compliant.

"Integrating the systems takes some upfront IT work, but it's well worth it," says Himmelfarb. "You get a simplified shipping process with more robust DG capabilities. Long story short, it's the ideal solution."

#### LABELMASTER'S DGIS ALLOWS API INTEGRATION

Labelmaster's DGIS software is the most robust Dangerous Goods software available that allows API integration. Many programmers consider an API to be the most sophisticated level of integration between any two systems.

API stands for "applied program interface." APIs allow one cloud-based program—like a shipper's ERP platform—to link to another cloud-based program without any interruptions to its interface. To the user, it appears as if everything is part of the same system.

"It's like when a website includes a YouTube video," adds Himmelfarb. "You don't have to open YouTube to watch the video. It's right there on the page you're already viewing."

With its API technology, DGIS integrates seamlessly with most major ERP platforms, including SAP. Himmelfarb says, "Integrating DGIS with your ERP system gives you true bestof-breed logistics technology for streamlined compliance."

Learn more about DGIS integration at labelmaster.com/software.



# STATE I CON

## Lithium battery shipping has never been more challenging. Will the future be easier?



Since 2014, lithium batteries have been the #1 story in the Dangerous Goods galaxy, and there's no real #2. Battery-related topics have dominated the Dangerous Goods Symposium (see page 10) and the Labelmaster blog. But will this always be the case?

#### A SNAPSHOT OF CURRENT REGULATIONS

A complete review of lithium battery transport regulations would require most of the pages of this magazine, but here's a high-level view of the most important restrictions as of May 1, 2017:

- No standalone lithium batteries (UN 3480 and 3090), in any quantity or packaging, may be shipped as cargo on passenger aircraft.
- A number of airlines have imposed variations that require standalone batteries to be shipped only under Section IA or IB of packing instructions 965 or 968 (e.g., FedEx Express and and UPS Air will not accept UN 3090 or UN 3480 offered as Section II). Today there are more than 140 airline variations associated with lithium batteries, meaning many locations are not serviced by air transport.
- Batteries packed with or in equipment (UN 3481 and 3091) may still be shipped on passenger aircraft, subject to regulations.
- All lithium batteries may still be transported on cargo-only aircraft, subject to regulations and carrier restrictions.
- Standalone lithium ion batteries (UN 3480) can be shipped only by air with a state of charge at 30% or less.

- ICAO is expected to announce new standards for lithium battery packaging and transport based on the Society of Aeronautical Engineers G-27 Lithium Battery Packaging Performance Standard.
- The PHMSA HM-215N Final Rule, mandating new Class 9 Lithium Battery labels in harmonization with the 2017–2018 ICAO Technical Instructions, was published March 30, 2017. Mandatory compliance begins January 1, 2018.
- The UN Transport of Dangerous Goods Sub-Committee has embarked on a major initiative to reconsider the classification of lithium batteries. The first meeting was held in Montreal, April 27–29, 2017.

Would regulatory bodies reevaluate these restrictions if a technological advance were made to make lithium battery transport safer?

#### THE FUTURE OF COMPLIANT LITHIUM BATTERY SHIPPING

Labelmaster recently partnered with a premier technology provider to design and develop a new lithium battery packaging solution that will transform lithium battery transport.

## The packaging is code-named "Omega." Its single-use fiberboard and multi-use metal packages:

- + Are lighter and far less complex than today's compliant packaging
- + Are easy to assemble
- + Require no extra inner packaging, gel-packs, pellets or liners

Yet Omega packs and boxes contain pressure, fire, flame, gas and ballistic projectile hazards well enough to meet ICAO G-27 draft standards at a 100% state of charge.

LIGHTWEIGHT FIBERBOARD FOR SINGLE USE

> MULTI-USE METAL FOR LARGER BATTERIES AND QUANTITIES

Labelmaster has applied for a U.S. Department of Transportation Special Permit for Omega packaging.

We expect this packaging to be a game-changer for all or any of the following:

- Electronics retailers
- Medical device manufacturers
- Third-party logistics
- Reverse logistics
- Battery recycling and disposal

Interested in testing Omega packaging for your lithium battery shipping needs? Contact Marilyn Barkley at mbarkley@labelmaster.com.



Watch the demo videos at labelmaster.com/omega



#### LABELMASTER WILL HOST THE 12TH ANNUAL DANGEROUS GOODS SYMPOSIUM SEPTEMBER 6–8, 2017, AT CHICAGO'S HISTORIC DRAKE HOTEL

The Drake may be most famous for its role in that 1980 classic movie, *The Blues Brothers*. But you don't need a full tank of gas, half a pack of cigarettes and dark sunglasses to make it to Chicago for the 2017 Dangerous Goods Symposium. All you need is to register!

Sign up now at labelmaster.com/symposium

#### **SYMPOSIUM SESSIONS** YOU WON'T WANT TO MISS

As always, we'll cover all the important topics that make the Symposium a can't-miss destination for DG pros worldwide:

- International regulatory updates: ICAO, IMDG, ADR, GHS and TDG, IAEA
- North American regulatory updates:
  49 CFR, Rail
- Safety management systems
- Technology and training workshop
- Auditing workshop
- PHMSA workshop
- Regulatory imperatives: carriers, regulators and manufacturers
- And, of course ... lithium batteries!



## Here's what DG pros said about the 2016 Dangerous Goods Symposium

"I think it's the ultimate conference. What Labelmaster brings to the table is absolutely unlike any other event I go to."

Sonia Irusta, Bureau of Dangerous Goods, Ltd

"There are other trade shows and meetings out there, but no other conference, symposium or meeting actually focuses on what instructors need to do to perform their jobs better."

Jay Johnson, Inmark

"This is where you get all the updates. You have manufacturers, shippers, redistributors, carriers, attorneys, PHMSA, IATA. Everyone is here."

Erin Gaul, Geodis

"There are so many different industries here, it's definitely an eye-opener."

Brandon Keeling, Republic Airways Holdings

"The competency-based training session was very helpful because that's such a huge push right now."

Pete McCraren, United Airlines

"It's been quite an eye-opener. I like the open forum where people can ask questions. You realize there are other people out there who have similar issues."

Irena Mayne, Monarch Regulatory Services, Inc.

"The best Dangerous Goods professionals in the business are here, and you'd be silly to not come and meet them."

David Brown, Asurion

"I'm gushing about this event. I've had such a great time. Everybody's been awesome."

Angela Trupo, MPI Research, Inc.

## HOW DO YOU SPOT A Non-compliant HAZMAT LABEL?

#### Differences between compliant and non-compliant labels and markings may be hard to notice.

Shippers often complain about the hair-splitting differences spelled out by hazmat regulations. And while it's true that a difference of a gram here or a millimeter there isn't likely to make a shipment any less safe, **regulations have to be exact, or there's no point in enacting them.** 

Label regulations can seem especially persnickety. The difference between a compliant label and a cheaper, non-compliant label may be small and hard to notice, but you can bet your supply chain partners—and possibly DOT inspectors—will catch them.

Non-compliant labels will cost you more in the long run, due to fines and the cost of resending rejected shipments. But how do you spot them?

#### WHAT MAKES THESE LABELS AND MARKINGS NON-COMPLIANT?

On the next page are six non-compliant labels and markings, side by side with their compliant Labelmaster counterparts. We've detailed the errors and inconsistencies that make these cheaper products non-compliant.

Visit **labelmaster.com/compliance-is** to learn more about how Labelmaster can help keep your shipments in compliance.



#### **HAZARD CLASS 2** FLAMMABLE GAS TAB LABEL

#### What's wrong with it?

- Incorrectly rounded corners
- Incorrect inner border measuring between 1.2 and 1.3 mm wide
- Irregular outer border varies between 4.4 mm and 4.8 mm
- Hazard Class number exceeds the maximum allowed size of 12.7 mm

## NON-FLAMMABLE GAS

#### **HAZARD CLASS 2** NON-FLAMMABLE GAS LABEL

#### What's wrong with it?

- At 99 mm x 99 mm, does not meet the requirement to be a minimum of 100 mm on each side
- Is not a "square on point"
- Incorrectly rounded corners
- Incorrect inner border measuring approximately 1.7 mm wide
- Irregular outer border varies between 4.2 mm and 5.4 mm

#### **HAZARD CLASS 3** FLAMMABLE LIQUID LABEL

#### What's wrong with it?

- Incorrectly rounded corners .
- Incorrect inner border measuring less than 1 mm wide
- Irregular outer border varies between 4.5 mm and 5 mm
- May not meet color tolerances specified in §172.407(d)

## **HAZARD CLASS 3** FLAMMABLE LIQUID TAB LABEL •

## What's wrong with it?

- Incorrectly rounded corners
- Incorrect inner border measuring less than 1 mm wide
- Irregular outer border varies between 5.75 mm and 6 mm
- Hazard Class number exceeds the maximum allowed size of 12.7 mm

#### MARINE POLLUTANT MARK

#### What's wrong with it?

- At 99 mm x 99 mm, does not meet the requirement to be a minimum of 100 mm on each side
- Is not a "square on point"
- Incorrectly rounded corners

#### **RADIOACTIVE MATERIAL, EXCEPTED PACKAGE LABEL**

#### What's wrong with it?

The red hatch outer border is in the opposite diagonal direction of the figures displayed in ICAO/IATA manuals

## **COMPLIANCE**

**COMPLIANCE** 

IS ....

IS ...





FLAMMABLE GAS



FLAMMABLE LIQUID









COMPLIANCE

IS ...

IS ....

IS ....











Labelmaster's comprehensive selection of hazmat compliance publications, training materials, software and services makes it easy for you to stay current with the latest regulations. The newest editions are available in a variety of print and digital formats to fit your individual needs, allowing you to access the regulations when and where you need them. USB and web portal editions are updated throughout the year, so you'll always be up to date! Find the complete selection of regulatory publications and other training products on labelmaster.com.



















DOT0135



DOT0134



WEBTRANS



#### **REGULATORY PUBLICATIONS**

#### **IATA DGR 58TH EDITION**

PRODUCT NUMBER	DESCRIPTION	PRICE
IATA0031	English, Standard Bound	\$318.00
IATA0032	English, Spiral Bound	\$329.00
IATA0036	CD-ROM, English	\$359.00

#### **IATA LITHIUM BATTERY SHIPPING GUIDELINES 2017**

PRODUCT NUMBER	DESCRIPTION	PRICE
IATA0061	Book	\$199.00
IATA0055	CD-ROM	\$199.00

#### EARLY 49 CFR-REVISED OCTOBER 2016

PRODUCT NUMBER	DESCRIPTION	PRICE
EARLY0031	Standard Bound	\$42.50
EARLY0032	Spiral Bound	\$53.00
USB49	USB Drive	\$49.00
WEB49	Online Edition	\$49.00

#### **GOVERNMENT 49 CFR-REVISED OCTOBER 2016**

PRODUCT NUMBER	DESCRIPTION	PRICE
DOT0134	Standard Bound	\$43.00
DOT0135	Spiral Bound	\$54.00

#### **DIGITAL PUBLICATIONS BUNDLE**

PRODUCT NUMBER	DESCRIPTION	PRICE
USBTRANS	49 CFR, IATA DGR and ERG (USB Drive)	\$349.00
WEBTRANS	49 CFR, IATA DGR and ERG (Online Edition)	\$349.00

#### **38TH AMENDMENT IMDG CODE**

PR	RODUCT NUMBER	DESCRIPTION	PRICE
IN	M00027	2-Vol. Set, English	\$242.50
U	JSBIMO38	USB Drive	\$350.50



DANGEROUS GOODS REPORT 14

#### **ONLINE TRAINING**



#### **3 NEW ONLINE TRAINING COURSES NOW AVAILABLE!**

Labelmaster is proud to introduce three new online learning courses to keep your employees and shipments safe and compliant.

Online training provides the flexibility to take your course anytime and anywhere you have an Internet connection. You choose how and when to fit it into your work day, which means no lost productivity. We have three new and engaging training modules to help your business stay in compliance.

#### **GENERAL AWARENESS HAZMAT TRAINING**

PRODUCT NUMBER	DESCRIPTION	QUANTITY PRICE 1-9	QUANTITY PRICE 10+
SHPGA	The U.S. Department of Transportation requires the general awareness training specified in 49 CFR Part 172.704 be taken every three years. This 90-minute interactive online course meets the general awareness training requirements.	\$99.00	\$75.00

#### SHIPPING EXCEPTED LITHIUM BATTERIES

[	PRODUCT NUMBER	DESCRIPTION	QUANTITY PRICE 1-9	QUANTITY PRICE 10+
	SHPEXLB	A 60-minute course for individuals who perform or direct the functions of packaging, marking, labeling or loading packages containing excepted lithium batteries for shipment by highway, rail, air or vessel.	\$129.00	\$100.00

#### FULLY REGULATED LITHIUM BATTERY SHIPPING

PR	ODUCT NUMBER	DESCRIPTION	QUANTITY PRICE 1-9	QUANTITY PRICE 10+
SI	HPLB	Meets the USDOT training requirements for individuals who perform or direct the functions of packaging, marking, labeling or loading packages containing lithium batteries for shipment by highway, rail, air or vessel.	\$199.00	\$150.00

· Choose from a broad selection of blank and custom labels in a variety of colors and sizes



#### LABELS

· Get the quality and durability you need

• Regulatory experts are available to help you ensure compliance

• Automated tools like our Hazmat Label Finder<sup>sm</sup> help you find

the right solution quickly: labelmaster.com/labelfinder

Every uninterrupted, on-time and fully compliant shipment starts with the correct label. Our labels are not only durable, they're also guaranteed to be compliant with all domestic and international regulations.

· Labels are available in a variety of materials that meet the latest regulations for every mode of transportation



WMT8712

0-10-0-00-0

WMCA812

WMTNJ812

AST





CFWM812











BWMV12





JWMCA12

PRODUCT NUMBER	DESCRIPTION	FORMAT	UNITS	PRICE
WM812	Standard Waste Label for 12mm UN/NA, Stock, PVC-Free Film, 6" x 6"	Pack	100	\$27.70
WM812P	Standard Waste Label for 12mm UN/NA, Personalized, PVC-Free Film, 6" x 6"	Pack	25	\$11.45
WMLZ812	Standard Waste Label for 12mm UN/NA, Laser Vinyl, 6" x 6"	Pack	100	\$118.88
WMLZ8212	Standard Waste Label for 12mm UN/NA, Laser Vinyl, 6" x 5"	Pack	25	\$44.90
CFWM812	Standard Waste Label for 12mm UN/NA, Pin-Feed, PVC-Free Film, 6" x 5.875"	Pack	500	\$186.75
WMT8712	Standard Waste Label for 12mm UN/NA, Thermal Paper, 6" x 6"	Roll	100	\$22.65
WMT8712P	Standard Waste Label for 12mm UN/NA, Personalized, Thermal Paper, 6" x 6"	Roll	100	\$44.32
WMT812	Standard Waste Label for 12mm UN/NA, Thermal, PVC-Free Film, 6" x 6"	Roll	100	\$24.40
WMCA812	California Waste Label for 12mm UN/NA, Stock, PVC-Free Film, 6" x 6"	Pack	100	\$33.90
WMCA812P	California Waste Label for 12mm UN/NA, Personalized, PVC-Free Film, 6" x 6"	Pack	25	\$14.20
WMTCA812	California Waste Label for 12mm UN/NA, Thermal PVC-Free Film, 6" x 6"	Roll	100	\$40.06
WMNJ812	New Jersey Waste Label for 12mm UN/NA, Stock, PVC-Free Film, 6" x 6"	Pack	100	\$41.26
WMNJ812P	New Jersey Waste Label for 12mm UN/NA, Personalized, PVC-Free Film, 6" x 6"	Pack	25	\$14.20
WMTNJ812	New Jersey Waste Label for 12mm UN/NA, Thermal PVC-Free Film, 6" x 6"	Roll	100	\$51.25
BWMV12	Non-RCRA Regulated Waste Label for 12mm UN/NA, PVC-Free Film	Pack	100	\$25.16
BWMV12P	Non-RCRA Regulated Waste Label for 12mm UN/NA, Personalized, PVC-Free Film	Pack	25	\$22.20
BWMTL12	Non-RCRA Regulated Waste Label for 12mm UN/NA, Thermal PVC-Free Film	Roll	100	\$36.70
JWMCA12	Excluded Recyclable Material Label for 12mm UN/NA, Paper	Pack	100	\$55.50

#### New styles for waste labels accommodate 12mm UN/NA numbers.





LB435C-3480



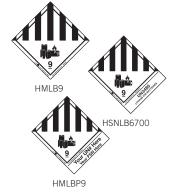
LB435P



LB435T

NEW

NEW













#### LITHIUM BATTERY MARKS

With the recent changes in lithium battery shipping regulations, these marks can now be used on all packages carrying lithium ion or metal batteries. Available as 120mm x 110mm or 105mm x 74mm markings in paper or PVC-free film, these handling marks have space to designate the UN number of the lithium battery being shipped as well as a telephone number for additional information required by the regulations.

- Choose personalized labels and we'll imprint your information for you
- Also available preprinted with CHEMTREC<sup>®</sup> emergency contact information and UN numbers (only companies registered with CHEMTREC<sup>®</sup> are authorized to use these labels)

Also available with an included tab attached below the mark with space to provide additional information (e.g., ICAO/ IATA Section II Packing Instruction number, proper shipping name, etc.).

PRODUCT NUMBER	DESCRIPTION	FORMAT	UNITS	PRICE
LB735	Blank, 105mm x 74mm, Paper	Roll	500	\$40.98
LB435C-3481	Preprinted with UN3481 and CHEMTREC® Contact Information, 120mm x 110mm, Paper	Roll	500	\$73.43
LB435C-3480	Preprinted with UN3480 and CHEMTREC® Contact Information, 120mm x 110mm, Paper	Roll	500	\$73.43
LB435P	Personalized With Your UN Number and Contact Information, 120mm x 110mm, Paper	Roll	500	\$77.30
LB435T	Blank with Tab, 126mm x 140mm, Paper	Roll	500	\$39.00
LB435TP	Personalized with Tab, 126mm x 140mm, Paper	Roll	500	\$48.85

#### HAZARD CLASS 9 LITHIUM BATTERY LABELS

These newly created labels can be used as of January 1, 2017, and they meet the design and durability requirements of:

- The 19th Revised Edition of the UN Model Regulations
- The 2017–2018 Edition of the ICAO Technical Instructions
- The 58th Edition of the IATA Dangerous Goods Regulations
- The 2016 Edition of the IMDG Code

PRODUCT NUMBER	DESCRIPTION	FORMAT	UNITS	PRICE
HMLB9	100mm x 100mm, Paper	Roll	500	\$38.10
HSNLB6700	UN3480 Lithium Ion Batteries, 100mm x 120mm, 6mm Text	Roll	500	\$41.50
HSNLBP9	Personalized, 100mm x 120mm, Standard Tab	Roll	500	\$97.00

#### CARGO AIRCRAFT ONLY MARKINGS

PRODUCT NUMBER	DESCRIPTION	FORMAT	UNITS	PRICE
L20R	100mm x 120mm, Paper	Roll	500	\$46.00
SL20R	100mm x 120mm, PVC-Free Film	Roll	500	\$86.60

#### **ORIENTATION ARROWS**

PRODUCT NUMBER	DESCRIPTION	FORMAT	UNITS	PRICE
L305	2 <sup>15</sup> / <sub>16</sub> " x 4 ", Paper	Roll	500	\$50.00
L22	3¼" x 4½", Paper	Roll	500	\$50.00

#### **DOT LITHIUM BATTERY MARKING**

PRODUCT NUMBER	DESCRIPTION	FORMAT	UNITS	PRICE
L415	4" x 2", Paper	Roll	500	\$47.50

#### HAZMAT SHIPPING PAPER TAB

PRODUCT NUMBER	DESCRIPTION	FORMAT	UNITS	PRICE
LT196U	2" x ¾", Paper	Roll	500	\$34.02

#### MARKERS

PRODUCT NUMBER	DESCRIPTION	FORMAT	UNITS	PRICE
SF30R	Fine Point	Each	1	\$2.85
SF31R	Medium Point	Each	1	\$2.85
SF15R	Heavy Point	Each	1	\$2.85

#### SOLUTIONS

#### PLACARDS



70PP3077

Whether they're on trucks, trains or shipping containers, our durable, reliable DOT placards stand up to the elements because they are printed with long-life UV inks that resist peeling, chipping and fading. Placard holders, security seals and placard accessories are also available to help keep your shipments compliant. Need help finding the right placard? Use Labelmaster's Placard Finder tool to track down what you're looking for or quickly customize your four-digit placards: labelmaster.com/placardfinder

#### **HAZARD CLASS 2**

PRODUCT NUMBER	DESCRIPTION	MATERIAL	FORMAT	UNITS	PRICE
Z-EZ8	10 <sup>3</sup> /4" x 10 <sup>3</sup> /4"	E-Z Removable Vinyl	Pack	25	\$18.75
Z-EZ3	10 <sup>3</sup> /4" x 10 <sup>3</sup> /4"	E-Z Removable Vinyl	Pack	25	\$18.75
Z-EZ16	10 <sup>3</sup> /4" x 10 <sup>3</sup> /4"	E-Z Removable Vinyl	Pack	25	\$18.75
Z-EZ25	10 <sup>3</sup> /4" x 10 <sup>3</sup> /4"	E-Z Removable Vinyl	Pack	25	\$18.75
Z-EZ28	10¾" x 10¾"	E-Z Removable Vinyl	Pack	25	\$18.75

#### HAZARD CLASS 3

PRODUCT NUMBER	DESCRIPTION	MATERIAL	FORMAT	UNITS	PRICE
Z-EZ2	10¾" x 10¾"	E-Z Removable Vinyl	Pack	25	\$18.75
Z-EZ9	10¾" x 10¾"	E-Z Removable Vinyl	Pack	25	\$18.75

#### **HAZARD CLASS 4**

PRODUCT NUMBER	DESCRIPTION	MATERIAL	FORMAT	UNITS	PRICE
Z-EZ13	10¾" x 10¾"	E-Z Removable Vinyl	Pack	25	\$18.75
Z-EZ21	10¾" x 10¾"	E-Z Removable Vinyl	Pack	25	\$18.75
Z-EZ23	10¾" x 10¾"	E-Z Removable Vinyl	Pack	25	\$18.75

#### **HAZARD CLASS 5**

PRODUCT NUMBER	DESCRIPTION	MATERIAL	FORMAT	UNITS	PRICE
Z-EZ6	10¾" x 10¾"	E-Z Removable Vinyl	Pack	25	\$18.75
Z-EZ52	10¾" x 10¾"	E-Z Removable Vinyl	Pack	25	\$18.75

#### **HAZARD CLASS 6**

PRODUCT NUMBER	DESCRIPTION	MATERIAL	FORMAT	UNITS	PRICE
Z-EZ27	10¾" x 10¾"	E-Z Removable Vinyl	Pack	25	\$18.75
Z-EZ5	10¾" x 10¾"	E-Z Removable Vinyl	Pack	25	\$18.75
Z-EZ32R	10¾" x 10¾"	E-Z Removable Vinyl	Pack	25	\$18.75
Z-EZ29	10¾" x 10¾"	E-Z Removable Vinyl	Pack	25	\$18.75

#### **HAZARD CLASS 7**

PRODUCT NUMBER	DESCRIPTION	MATERIAL	FORMAT	UNITS	PRICE
Z-EZ7R	10¾" x 10¾"	E-Z Removable Vinyl	Pack	25	\$18.75

#### HAZARD CLASS 8

PRODUCT NUMBER	DESCRIPTION	MATERIAL	FORMAT	UNITS	PRICE
Z-EZ4	10¾" x 10¾"	E-Z Removable Vinyl	Pack	25	\$18.75

#### HAZARD CLASS 9

PRODUCT NUMBER	DESCRIPTION	MATERIAL	FORMAT	UNITS	PRICE
Z-EZ19	10 <sup>3</sup> /4" x 10 <sup>3</sup> /4"	E-Z Removable Vinyl	Pack	25	\$18.75

#### DANGEROUS PLACARDS

PRODUCT NUMBER	DESCRIPTION	MATERIAL	FORMAT	UNITS	PRICE
Z-EZ1	10¾" x 10¾"	E-Z Removable Vinyl	Pack	25	\$18.75

#### MARKINGS

PRODUCT NUMBER	DESCRIPTION	MATERIAL	FORMAT	UNITS	PRICE
PSRDT	273mm x 273mm	Removable Vinyl	Pack	25	\$23.75
LQMR	273mm x 273mm	Removable Vinyl	Pack	25	\$21.83

#### ORANGE PANELS

PRODUCT NUMBER	DESCRIPTION	MATERIAL	FORMAT	UNITS	PRICE
ZOPP3077	400mm x 160mm	Permanent Vinyl	Pack	25	\$89.75

#### SOLUTIONS

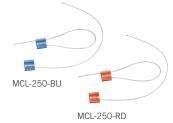


















KLICK10-H-BU

KLICK10-H-RD

## PACKAGING

Stay in compliance with the latest hazmat shipping regulations with Labelmaster's full line of UN-certified packaging products. From 4GV and glass to metal and plastic, we offer a complete selection of packaging options. Specialized packaging options include:

- §173.13 packaging
- Special permit packaging
- · Battery packaging

- Infectious substance packaging
- · Parts packaging
- · Temperature-controlled packaging

In addition, a wide range of drums, jerricans, pails, wooden boxes, glass bottles, plastic bottles, caps and accessories is available. Our UN packaging has been designed, tested and certified in accordance with 49 CFR, ICAO, International Air Transport and IMDG/IMO requirements.

#### DAMAGED BATTERY RETURNS? THIS IS HOW IT'S DONE.

Labelmaster's Cellphone Recovery Kit is the state of the art in single-use packaging for the return of damaged battery-powered products, with relief from DOT 49 CFR §173.185 regulations via a DOT-SP 16011 Special Permit. See a step-by-step video on packaging and closure instructions at labelmaster.com/shop/klitspx1cell.

PRODUCT NUMBER	DESCRIPTION	FORMAT	UNITS	PRICE
KLITSPX1CELL	Inner Dimensions: 87/10" x 53/10" x 4"	Each	1	\$69.99
KLITSP9PAK	Inner Dimensions: 12" x 78/10" x 71/2"	Each	1	\$79.99

#### DRY ICE PACKAGING

PRODUCT NUMBER	DESCRIPTION	FORMAT	UNITS	PRICE
HMS-69110	Inner Dimensions: 11" x 9" x 13¾"	Each	1	\$30.33

#### **GLASS BOTTLE SHIPPING KITS**

PRODUCT NUMBER	DESCRIPTION	FORMAT	UNITS	PRICE
UN32FAPS	32 Oz. Amber Bottle, 33mm Cap, Assembled Kit	Each	1	\$18.01
UN4LFAPT	4 L Narrow Mouth Bottle, Foam Insert, Assembled Kit	Each	1	\$30.72

#### VERMICULITE

PRODUCT NUMBER	DESCRIPTION	FORMAT	UNITS	PRICE
KTV400R	Grade 4A, Extra-Coarse, 4-Cu. Ft. Bag	Each	1	\$26.80

#### OTHER HELPFUL PRODUCTS

Having the right supplies to protect and ship your Dangerous Goods can make the difference between a safe, on-time delivery and a potentially hazardous incident. You can rest easy knowing that our shipping supplies can help ensure your shipments get where they need to be when they need to be there.

#### **14" CABLE LOCK SEALS**

PRODUCT NUMBER	DESCRIPTION	FORMAT	UNITS	PRICE
MCL-250-BU	Blue, 14" x 2.5mm Dia., Aluminum Body with Galvanized Cable, Stock	Case	500	\$842.70
MCL-250-RD	Red, 14" x 2.5mm Dia., Aluminum Body with Galvanized Cable, Stock	Case	500	\$842.70
MCL-250-CU-BU	Blue, 14" x 2.4mm Dia., Aluminum Body with Galvanized Cable, Personalized	Case	500	\$908.24
MCL-250-CU-RD	Red, 14" x 2.4mm Dia., Aluminum Body with Galvanized Cable, Personalized	Case	500	\$908.24

#### **HEAVY-DUTY ADJUSTABLE PULL-UP STRAP SEALS**

PRODUCT NUMBER	DESCRIPTION	FORMAT	UNITS	PRICE
P-9001-RD	Red, 8", Plastic, Personalized	Case	1,000	\$265.00
P-9001-BK	Black, 8", Plastic, Personalized	Case	1,000	\$265.00
P-9001-BU	Blue, 8", Plastic, Personalized	Case	1,000	\$265.00

#### **KLICKER BOLT LOCK**

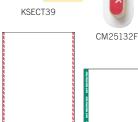
PRODUCT NUMBER	DESCRIPTION	FORMAT	UNITS	PRICE
KLICK10-H-RD	Red, 2" x 10mm Dia., ABS-Covered Steel, Stock	Case	250	\$374.53
KLICK10-H-BU	Blue, 2" x 10mm Dia., ABS-Covered Steel, Stock	Case	250	\$374.53
KLICK10-H-CU-RD	Red, 2" x 10mm Dia., ABS-Covered Steel, Personalized	Case	250	\$383.90
KLICK10-H-CU-BU	Blue, 2" x 10mm Dia., ABS-Covered Steel, Personalized	Case	250	\$383.90











#### **OTHER HELPFUL PRODUCTS (CONTINUED)**

#### **TIP-N-TELL®**

	PRODUCT NUMBER	DESCRIPTION	FORMAT	UNITS	PRICE
ľ	TNTR	2 <sup>3</sup> /4" x 3 <sup>7</sup> /8"	Case	100	\$135.71

#### **BOX CUTTERS**

PRODUCT NUMBER	DESCRIPTION	FORMAT	UNITS	PRICE
K997005YEL	Easy Cut™ 2000 Utility Knife, Yellow	Each	1	\$10.20
K9548460R	Easy Cut™ Utility Knife, Orange	Each	1	\$8.20
K954844B	Easy Cut™ Utility Knife, Blue	Each	1	\$8.20

#### SECURITY TAPE

PRODUCT NUMBER	DESCRIPTION	FORMAT	UNITS	PRICE
KSECT39	Printed Tamper-Evident Seal Tape Strips, 3" x 9"	Pack	100	\$35.05
NV-PVT2R-217D-180-RL	Tamper Evident Tape, Premium, Red, 2" x 180' Roll	Each	1	\$64.00

#### **COLDMARK<sup>™</sup> FREEZE INDICATORS**

PRODUCT NUMBER	DESCRIPTION	FORMAT	UNITS	PRICE
CM25132F	32°F/0°C	Pack	100	\$323.75
CM25126F	26°F/-3°C	Pack	100	\$323.75

#### **SHIPPING PAPERS**

PRODUCT NUMBER	DESCRIPTION	FORMAT	UNITS	PRICE
F07LB	Shipper's Declaration for Dangerous Goods Form, Laser Blank	Pack	100	\$26.68
F87L	Shipper's Declaration for Articles Not Regulated as DG, Laser Form	Pack	100	\$26.68
CF27	Uniform Hazardous Waste Manifest, Pin-Feed Form	Case	500	\$265.90
F375-4P	Straight Bill of Lading Form, Snap Out, 4-Pt, Personalized	Pack	100	\$50.40



#### **DGIS SOFTWARE MAKES COMPLIANCE CLICK.**

#### **Be Compliant**

F07LB

DGIS stays current with the latest regs, including Air Regulations powered by IATA DGR.

F87L

#### **Increase Efficiency**

DGIS REGS

**DGIS EXPRESS** 

Features like auto-fill templates and parts management greatly reduce the time it takes to get shipments out the door.

#### **ERP Integration**

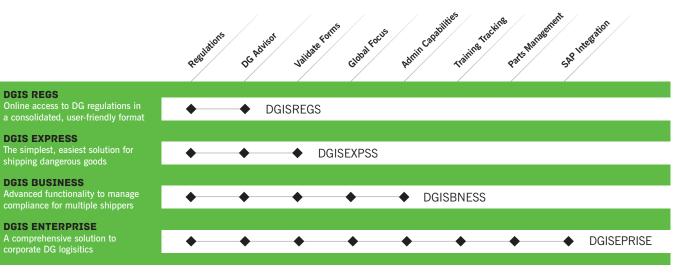
DGIS is a SAP NetWeaver certified partner, which allows for improved integration with SAP. DGIS also allows for seamless integration with other ERP systems and critical business software.



DGIS is recognized by major carriers including FedEx and UPS as a validation solution.



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SOLUTIONS



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