THE LATEST UPDATES TO THE ANSI AND ISO PRODUCT SAFETY LABEL STANDARDS

By Erin Earley

Find out what you need to know to reassess your company’s product safety labels based on the latest revisions of ANSI Z535.4 and ISO 3864-2.

The starting point for formatting the content of your company’s product safety labels should always be the options presented in the primary ANSI and ISO standards on this subject. In the U.S., this is the ANSI Z535.4 Standard for Product Safety Signs and Labels. Internationally, it’s ISO 3864-2 Graphical symbols – Safety colours and safety signs – Part 2: Design principles for product safety labels. Both of these standards are revised regularly according to ANSI and ISO procedures, typically every five years, with the latest revision cycles falling in late 2016 and early 2017 for both. Here to help explain the latest updates to these standards is Angela Lambert, Director of Standards Compliance at Clarion Safety Systems.

Why is it important to be aware of the latest standards updates?

Your legal obligation as a product manufacturer is to meet or exceed the current versions of standards related to your products when they’re placed into commerce. Using the principal product safety label standards – ANSI Z535.4 and ISO 3864-2 – for the design and layout of your labels is key to fulfilling that requirement. Legally, when a standard is revised, your duty to warn in the U.S. obligates you to making sure your labels are still in compliance with the latest updated standard. Internationally, a number of compliance issues hinge on meeting current standards because many countries and regions use adherence to the latest standards as a measure of a manufacturer’s efforts to meet industry best practices.

What are the most recent changes we’ve seen to these standards?

ANSI Z535.4 is in the process of being balloted for reaffirmation without changes. If that occurs, the new version will be identical to the 2011 standard. The revised ISO 3864-2 standard was published in December 2016 and it includes several significant changes to the label formats it allows. It’s important to be aware of these changes to ISO 3864-2 and to understand why one format may be more appropriate for your product than another.

Before we explore those changes, can you explain your background and insight into the standards update?

Claron is very involved in the ANSI and ISO standards, with our CEO serving as chairman of the ANSI Z535 Committee for Safety Signs and Colors and ANSI’s U.S. Technical Advisory Group to the ISO standards committee responsible for safety signs, labels, colors and symbols. This ISO committee, ISO/TC 145, is responsible for writing and revising ISO 3864-2. As part of our role, I had the privilege of attending the ISO/TC 145 standards meeting in Berlin in the fall of 2016 when the final version of the new ISO 3864-2 standard was affirmed for publication after several years of revision work. It’s a moment I’m proud to have been a part of. I’m also grateful to be involved in the standards-making process as it gives me a stronger understanding of the latest updates and the intentions of the committees responsible for these standards – the most important industry standards for on-product warnings.

Erin Earley, head of communications at Clarion Safety Systems, has written extensively about workplace safety and product safety label trends. Clarion’s CEO, Geoffrey Peckham, is chair of the ANSI Z535 Committee for Safety Signs and Colors and of ANSI’s U.S. TAG to the ISO standards committee responsible for safety signs, labels, colors and symbols (ISO/TC 145).
What are the main updates to ISO 3864-2:2016?

There were two major changes to ISO label formats:

- **The safety label format that used a single safety symbol without an ISO-colored surround shape was removed from the standard.** (see *Label A* in Figure 1). From the committee’s perspective, and as defined in the first edition of ISO 3864-2, product safety labels must use at least one ISO-formatted safety symbol (meaning, the symbol is placed in an ISO 3864-colored surround shape) in addition to the “general warning sign” that serves as the safety alert symbol on the label’s severity level panel. See Figure 1’s *Label B*. Non-ISO-formatted symbols can still be used on product safety labels, but only in addition to one or more ISO-formatted symbols. ISO 3864-2 defines these safety symbols as “supplementary.” See Figure 1’s *Label C*.

- **A new “wordless” format that conveys risk severity was added to the standard.** This new label format uses what ISO 3864-2 defines as a “hazard severity panel” without a signal word. This panel that appears at the top of a product safety label communicates the level of risk through color-coding and the use of the ISO-formatted general warning symbol. This format option, already in use by a wide variety of product manufacturers, eliminates words—making translations unnecessary. See Figure 2.

What are the next steps for product manufacturers?

It’s important to be aware that the changes made in ISO 3864-2 are significant. In a very real way, these changes open up new format possibilities that, if intelligently used, can help companies to better warn their product users about potential hazards associated with their products. Because the ISO standard changed, it’s a time to reevaluate your labels to see if 1) they continue to meet your market’s requirements, and 2) whether or not the “wordless” format makes sense for some or all of your labeling. The ISO product safety label standard gives you new options to choose from when it comes to how best to convey your safety message. You should see this standard’s revision as an opportunity to fully refresh your labels, reviewing both their content and format in line with your product’s risk assessment and market requirements.

![Figure 1: Safety label formatting options that are no longer accepted (shown in Label A) and accepted (shown in Labels B and C) by ISO 3864-2:2016. (Label designs ©Clarion Safety Systems. All rights reserved.)](image1)

![Figure 2: Example of the new “wordless” safety label format option allowed by ISO 3864-2:2016.](image2)
From your standpoint, what’s most exciting about this update?

While the world has been trending towards graphic-based safety label designs for some time, the new wordless format added to ISO 3864-2 is groundbreaking because it provides a standardized “symbol-only” format for everyone – whether in the U.S. or internationally – to follow. There’s an added measure of complexity that goes with doing business today when a company exports globally and/or has a multi-national workforce. The ISO/TC 145 committee is dedicated to keeping the international standards up-to-date so they can truly be a tool that’s relevant to communicating safety worldwide. This change to ISO 3864-2 was the result of this forward-thinking mindset. The wordless format bridges a gap between symbol-only labels and the need to provide more comprehensive information through the introduction of a hazard severity level panel.

Another interesting part of this standards update is the harmonization aspect. In the last two decades, harmonization of U.S. and international standards has taken leaps forward. Many ANSI standards are now in line with ISO standards. While ANSI Z535.4 doesn’t currently include the wordless format option, it may in the future; in the meantime, it allows manufacturers to use ISO 3864-2 formats through its section 3.1.1.

All of this is exciting work to be a part of because as the standards develop they provide product manufacturers with better tools to meet their safety label program objective of better protecting people from harm.

Stay tuned for our next discussion in this year’s On Your Mark series.

Do you have a suggestion for a topic you’d like to see covered? Contact the author at eearley@clarionsafety.com.

Erin Earley, head of communications at Clarion Safety Systems and a journalist by trade, has researched and written extensively about workplace safety and product safety label trends. Clarion is an active member of the ANSI and ISO standards committees. The company’s CEO, Geoffrey Peckham, is chair of the ANSI Z535 Committee for Safety Signs and Colors and of ANSI’s U.S. TAG to the ISO standards committee responsible for safety signs, labels, colors and symbols (ISO/TC 145). With over 50 million safety signs and labels in use in over 180 industries worldwide, their goal of making the world a safer place is taking shape. Erin can be reached at eearley@clarionsafety.com.