



TM

APPAREL AND GENERAL MERCHANDISE

The Transition from Clear to Black Hangers

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THE GLOBAL LANGUAGE
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GS1 US, a member of the global information standards organization GS1, brings industry communities together to solve supply-chain problems through the adoption and implementation of GS1 Standards. Nearly 300,000 businesses in 25 industries rely on GS1 US for trading-partner collaboration and for maximizing the cost effectiveness, speed, visibility, security and sustainability of their business processes. They achieve these benefits through solutions based on GS1 global unique numbering and identification systems, barcodes, Electronic Product Code (EPC®)-enabled RFID, data synchronization, and electronic information exchange. GS1 US also manages the United Nations Standard Products and Services Code® (UNSPSC®). www.GS1US.org.

1 GS1 US APPAREL AND GENERAL MERCHANDISE INITIATIVE

The GS1 US Apparel and General Merchandise Initiative (“the Initiative”) was formed as a result of the [GS1 US merger with Voluntary Interindustry Commerce Solutions[®] \(VICS[®]\) in 2012](#). The Initiative is an industry group committed to defining business challenges and opportunities, and organizing members to explore solutions and create adoption plans. Initiative members include a broad cross-section of apparel and general merchandise industry trading partners. The recommendations and noted advantages (including the criteria for black hangers) are coming from the GS1 US Hangers Workgroup.

The work of the Initiative is driven by Workgroups made up of industry stakeholders who collaborate to develop standards-based guidelines, best practices, case studies, and thought leadership. The former “VICS Floor-Ready Merchandise Committee” became the [“GS1 US Floor-Ready Merchandise Workgroup”](#). This Workgroup developed this document to provide the following recommendations and implementation guidelines for floor-ready merchandise, and present the findings of the GSI US survey conducted in the Spring of 2015.

NOTE: As with all GS1 Standards and solutions, the Hangers Guideline is voluntary, not mandatory. It should be noted that use of the words “must” and “require” throughout this document relate exclusively to technical recommendations for the proper application of the testing protocol to support the integrity of your application.

2 GS1 US 2015 SURVEY FINDINGS

In the Spring of 2015, the industry examined the effectiveness of the clear-to-matte-black hanger transition via a GS1 US industry survey. The survey included responses from twenty-eight (28) leading industry trading partners. Respondents included fifteen (15) garment manufacturers, six (6) fashion retailers, and seven (7) hanger manufacturers. The survey was designed to help GS1 US gauge how member companies were initially impacted by the conversion from clear to black hangers, and if that impact continues today. The survey found that:

- Seventeen (17) of the twenty-one (21) garment manufacturers and fashion retailers reported the initial transition as successful. (Four had some early struggles that have since been addressed.)
- All seven (7) hanger manufacturers reported that they are using recycled materials in the production of black hangers.
- The majority of garment manufacturers and fashion retailers reported that the initial 2011 transition issues have been resolved.

3 EXAMINING APPAREL HANGER MATERIALS

The [GS1 US Apparel and General Merchandise Initiative](#) believes that contributing to a more sustainable environment is good business practice and the right thing to do for the future generations. To that end, the Initiative looks to provide its membership and the industry with recommendations and guidelines for using resources more efficiently, providing an “eco-friendly” product that meets expectations, and striving to reduce the overall impact on the environment. Recycling plastics reduces the amount of energy and natural resources (such as water, petroleum and natural) needed to create virgin plastic. According to the American Plastics

Council, the production of plastics accounts for 4 percent of U.S. energy consumption, and 70 percent of plastics in the United States are made from domestic natural gas.¹ Benefits of recycling plastics include:

- Reduces the amount of waste sent to landfills and incinerators
- Conserves natural resources such as timber, water, and minerals
- Prevents pollution by reducing the need to collect new raw materials
- Saves energy
- Reduces greenhouse gas emissions that contribute to global climate change
- Helps sustain the environment for future generations ²

Looking to help reduce the retail industry's carbon footprint, the VICS Floor-Ready Merchandise Committee began investigating apparel hanger materials in 2009. Committee members, including Hanger Manufacturers, discussed the manufacturing processes, stating that clear resin hangers are made primarily from a blend of poly (styrene-butadiene-styrene, or SBS) and polystyrene (PS) resins, and their production depends on new oil resources. The use of recycled materials in the production of clear hangers was determined by the Committee to be a non-satisfactory solution due to clarity issues when recycled clear material was used. In contrast, the Committee discovered that matte black hangers can be made from a wider variety of resin materials, including PS resins, polypropylene (PP) resins, and a large pool of recycled resins. Moreover, their raw material sources are not limited to either new or recycled resins, enabling their production to incorporate a greater percentage of recycled materials.³

Because matte black hangers can be produced using recycled materials, the Committee determined that black matte hangers could help support industry efforts to reduce its carbon footprint.

4 ADVANTAGES OF USING MATTE BLACK HANGERS

During its investigation of apparel hanger materials, the VICS Floor-Ready Merchandise Committee discovered that the global market was trending toward black hangers, including almost exclusive usage in some international markets. They also determined these additional advantages of using matte black hangers, including:

- Black hangers are less susceptible to UV and environmental factors such as scratching that impact the appearance of clear hangers on the selling floor.
- Black hangers work well in both recycling and reuse programs.
- Black hangers offer an updated selling floor appearance.

¹ <http://environment.about.com/od/recycling/a/benefits-of-plastics-recycling.htm>

² <http://www2.epa.gov/recycle/recycling-basics>

³ <http://www.earth911.com/earth-watch/360-recycling-plastic-6/>

5 PROVIDING FOR A SUSTAINABLE HANGER ALTERNATIVE

Based on Committee findings, black hangers may lend themselves to sustainable business practices because they enable the use of recycled plastic materials (resins) in order to reduce natural resource requirements. Using black hangers manufactured with resins could dramatically reduce the retail industry's dependence on 100 percent new oil resources, providing the opportunity to make a meaningful difference in improving the environment.

As a leader in the industry, the GS1 US Apparel and General Merchandise Initiative continuously seeks to provide its membership with recommendations and guidelines to advance the industry, including approaches for a more sustainable hanger alternative. Prior to 2011, the hanger guidelines for floor-ready merchandise did not indicate the color of hangers. Therefore, in February 2011, VICS approved the new [Voluntary Guidelines for Hanger Specifications for Floor-Ready Merchandise](#) which recommended the standard color of the department store hanger (with metal hooks) transition from clear to matte black. The guideline was developed collaboratively by retailers, apparel companies and hanger manufacturers, and was industry-approved with sustainability in mind.

6 THE CRITERIA FOR THE TRANSITION

To support the transition, the VICS Floor-Ready Merchandise Committee identified key changeover criteria and performance guidelines. The new matte black hangers would have to follow the then existing VICS hanger profiles and performance criteria in order to be considered an acceptable substitute per the guidelines.

Although the new matte black hangers were able to meet the profiles and performance criteria in the VICS hanger guidelines, in some instances their grade of plastic and percent of use regrind had to be addressed based on varying hanger designs, applications and recycling. In response, the Committee decided that the VICS guideline would provide specifications for the color and matte finish, but would not specify the material to be used. The Committee felt that producing products to meet or exceed the existing performance criteria should “drive” material decisions and promote innovation. Allowing the industry to have flexible material options would also prevent material shortages, which had occurred in the past when producing clear hangers. Thus, the Committee collaborated and developed guidelines for color and sheen. A “matte black” standard was established in the guideline and color chips distributed to the industry at large.

7 INITIAL IMPLEMENTATION

Initially, not all retailers participated in the transition to matte black hangers. Over time, as more retailers and apparel manufacturers adopted the VICS hanger guideline, they began requesting that their hanger manufacturers (within the GS1 US Hanger Workgroup) transition their production to matte black. Further, as found in the GS1 US Spring 2015 Hanger Survey results, all respondents indicated that they had made the transition to the new hanger guideline-specified matte black hanger in all adult ranges.

Initial implementation faced some challenges:

- **Performance Specifications:** The new black hangers were manufactured to meet, or in some cases exceed, the existing VICS hanger performance specifications. However, in some instances, they did not perform to the same level as the clear poly (styrene-butadiene-styrene) and polystyrene (SBS/PS) blends. In most cases, the clear poly (styrene-butadiene-styrene) and polystyrene (SBS/PS) blends widely exceeded the performance specifications, delivering a far greater allowance for mis-application of hangers. For example, using hanger style 8108 (designed for swimwear) in place of a more robust hanger style such as 484 (designed for jackets) could result in hanger fatigue or failure.

Once these issues were understood, manufacturers were able to generate the proper blend of materials for each hanger configuration, and eliminate many of these early issues.

- **Temperature Tolerance:** At the outset, some of the new matte black hangers were adversely impacted by high temperatures when they were run through steam tunnel settings or subjected to increased temperatures during their travel inside shipping containers — something their predecessor clear poly (styrene-butadiene-styrene) and polystyrene (SBS/PS) hangers could withstand. Once the industry understood and adjusted to the new material's lower heat tolerance, the issue disappeared.
- **Staining of Apparel from Black Material:** Hanger manufacturers quickly addressed this issue by implementing more thorough testing processes and material specifications for recycled material and colorant agents.
- **Specifying Materials Based on Cost and Not on Performance:** In some cases, final users were specifying their hangers be made out of a specific cost-based material. However, the chosen material did not meet performance criteria. After a short period of time, this issue was recognized and the lower performing materials were no longer used.

8 THE IMPACT ON APPAREL MANUFACTURERS AND RETAILERS

Market drivers as identified below have positively impacted overall hanger costs for apparel manufacturers and retailers who purchased black hangers for use on private label products or in their Distribution Centers and/or Stores:

- The purchase price of the new black hangers decreased as manufacturing costs were reduced.
 - According to a 2012 Vendor Compliance Federation Report, moving to a black matte resin allowed for an increased resource pool of resins that resulted in lower production costs for hangers. This change has provided the industry less expensive new hangers. ⁴
 - Further, 66% of respondents to the 2015 GS1 US survey indicated that black hangers were less expensive to produce and to purchase.
 - A 2011 VICS Hangers Sustainability Study, showed a potential savings of up to \$86 million with a reduction in plastic of 53 million pounds. ⁵

⁴ www.rvcf.com/page/VCF_Report_12_05_3

⁵ <http://mhlnews.com/facilities-management/retail-chains-changing-sustainable-hangers>

9 THE IMPACT ON HANGER MANUFACTURERS

The GS1 US Survey indicated that hanger manufacturers experienced lower material costs in the production of matte black hangers using the VICS guidelines. However, the study found they also experienced higher operational costs in some cases:

- **Lower Material Costs:** Raw material cost has been mitigated by the ability to use recycled resins. (Due to reduced manufacturing costs, hanger manufacturers were able to pass on their savings via reduced hanger selling prices.)
- **Increased Manufacturing Cycle Times:** The additives used varied by manufacturing process. This caused the need for frequent manual adjustments of molding machines. As a result, some hanger manufacturers saw manufacturing cycle times grow.
- **Increased Quality Control Costs:** As a result of varying material specifications (for recycled resins versus the controlled manufacturing of virgin resins), hanger manufacturers had to implement more due diligence in their incoming inspection processes. This was confirmed in the 2015 GS1 US Survey results, where all manufacturers, re-furbishers, and recyclers agreed that their quality control costs had increased.

10 THE IMPACT ON HANGER REUSE COMPANIES

The GS1 US Survey found that some hanger reuse companies have experienced less recovery on the used hangers they have sold due to lower market prices for black recycled material where recyclers pay less for scrap product. In fact, the 2013 Plastics Technology Report cited, “Polypropylene prices have dropped significantly.”⁶

11 CONCLUSION

Survey findings indicate that the transition to matte black hangers has been successful. Although the industry initially experienced some transition challenges, there were relatively few issues overall. Adoption has been widespread, across varying store formats and sizes. From the largest mass merchant retailers and department stores, to the off-price retailers and local boutiques, the industry has increased its use of the new matte black hanger.

The GS1 US Survey found that the majority of apparel retailers, who formerly used the clear resin hangers (i.e., department stores, mid-tier retailers, mass merchants, discounters, military, and sporting goods), have voluntarily made the switch to the [Industry-recommended](#) matte black hangers. Based on the information obtained to date, it appears that four years after the approval of the [Voluntary Guidelines for Hanger Specifications for Floor-Ready Merchandise](#), the apparel and general merchandise industry has successfully transitioned to the matte black hanger.

⁶ <http://www.ptonline.com/articles/pp-ps-prices-drop-others-soften>



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