EXECUTIVE SUMMARY

The Campaign for Healthier Solutions a project of Coming Clean Inc. and the Environmental Justice and Health Alliance commissioned The Ecology Center Healthy Stuff Lab to conduct a screening of consumer products sold at discount retailers, also known as dollar stores. This report presents a summary of the results of the testing and highlights select products with hazardous chemicals of concern from Dollar General. Thirty-seven (37) Dollar General products were purchased at six retailers in California, Maine, New Mexico and Pennsylvania.

Sample Collection: In early 2021, 226 products were purchased from all of the leading dollar store retailers in the US and Canada. Products were purchased from seven states (Michigan, Pennsylvania, California, New Mexico, Washington, Maine, Texas) and Ontario, Canada. Products tested included 226 consumer products, 33 cans of food, and 22 packages of microwave popcorn. Receipts from 28 store purchases were also tested. The 226 products contained a total of 635 unique components or materials. Each of these were tested using one or more test methods, depending on the typical chemicals of concern for that product type. For food products, the packaging, not the food, was tested.

Chemicals of concern are those which, due to their inherent hazardous properties, present a known or reasonably suspected risk to human health and/or the environment. The levels of concern for each chemical were established by Healthy Stuff Lab by reviewing levels restricted in one or more of the most protective government, corporate, or third-party standards on hazards in consumer products.

These levels are similar to those used in our 2015 sampling of dollar store products. You can access the 2015 report here.

Products were subjected to 4 different analytical techniques:

**High-definition X-ray fluorescence spectroscopy (HD XRF):** 635 product components were screened for elements of interest by HD XRF using an HD Mobile spectrometer by XOS. This technique measures levels of elements heavier than aluminum on the periodic table. This includes toxic metals such as lead and cadmium as well as bromine, chlorine, and phosphorus that, depending on the matrix, can indicate flame retardant chemicals.
Fourier Transform Infrared (FTIR) spectroscopy:
A subset of components were analyzed by FTIR to
determine the polymer type (for example, cotton or
polyethylene) and major additives. A subset were also
subject to solvent extraction followed by FTIR to test
for the presence of additives such as plasticizers or
flame retardant chemicals.

Gas Chromatography/Mass Spectrometry (GC/MS)
Analysis: Eleven products determined to contain
ortho-phthalates (“phthalates”) or alternative
plasticizers according to our FTIR screening were sent
for further analysis at Eurofins, a contract laboratory.

Eurofins quantified phthalates by following the
CPSC test method CPSC-CH-C1001-09.4. The
method uses solvent extraction followed by
internal standard addition and analysis of the
extract by gas chromatography-mass spectrometry
(GC-MS) for phthalates and other plasticizers of
interest. The lab tested for eleven phthalates and
four alternative plasticizers.

Total Fluorine by Oxygen Flask Combustion and
Ion-Selective Electrode: Select food packaging was
evaluated for possible PFAS presence at Galbraith
Laboratories by measuring total fluorine. This
method detects fluorine from both polymeric and
non-polymeric PFAS and thus is used to screen
items for likely PFAS.

<table>
<thead>
<tr>
<th>Arsenic</th>
<th>Bromine</th>
<th>Cadmium</th>
<th>Chlorine</th>
<th>Chromium</th>
<th>Mercury</th>
<th>Lead</th>
<th>Antimony</th>
<th>Tin</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 100</td>
<td>&gt; 400</td>
<td>&gt; 100</td>
<td>&gt; 10,000</td>
<td>&gt; 100</td>
<td>&gt; 100</td>
<td>&gt; 100</td>
<td>&gt; 100</td>
<td>&gt; 100</td>
</tr>
</tbody>
</table>

Threshold Levels, in parts per million

CHEMICAL HAZARD SCREENING SUMMARY
DOLLAR GENERAL

The preliminary screening results for the
Dollar General products indicate a number of
chemical hazards are present in these
products. Overall, 43% of the products
screened had one or more chemicals of concern.
The following concerns were identified in the
products which were tested.

- Canned food products with PVC based can body coatings
- Microwave popcorn products with PFAS coatings inside the packaging
- Bisphenol S in 100% of store receipts tested from all retailers
- Products made with flexible PVC which have plasticizers

Number of Products with Chemical of Concern (COC) Detected, above screening level

<table>
<thead>
<tr>
<th>Retailer</th>
<th># Products</th>
<th>1 or more COC</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dollar General</td>
<td>37</td>
<td>16</td>
<td>43%</td>
</tr>
</tbody>
</table>

Note: This data is preliminary and subject to change as further analysis of these products is completed.
<table>
<thead>
<tr>
<th>Product/Brand</th>
<th>Distributor</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 Bounce Balls — DG/Dolgencorp, LLC</td>
<td>Paw Patrol Teether Rattle Toy — Regent Baby Products Corp.</td>
</tr>
<tr>
<td>9 oz. Bottle Silicone Nipple — Swiggsles</td>
<td>Pink Reusable Baggie — DG</td>
</tr>
<tr>
<td>Antibacterial Hand Sanitizer Spray — Dongguan Boze Technology Co. LTD</td>
<td>Plastic Tablecover, Multicolor 54 in. x 84 in. — DG/Dolgencorp, LLC</td>
</tr>
<tr>
<td>Baby King Sippy Cup — Regent Baby Products Corp.</td>
<td>Plates — Party!/Old East Main Co.</td>
</tr>
<tr>
<td>Bead Necklaces — Party!/Old East Main Co.</td>
<td>Princess Tiara — DG Party/Dolgencorp, LLC</td>
</tr>
<tr>
<td>Beef &amp; Bean Burrito — Tina’s</td>
<td>Pull-Top Sports Bottle — Kids 2 Grow</td>
</tr>
<tr>
<td>Clover Valley Crushed Tomatoes</td>
<td>Reusable Ice Cubes — trueliving/Old East Main Co.</td>
</tr>
<tr>
<td>Clover Valley Sweet Peas</td>
<td>Salsa Bowl — trueliving/Old East Main Co.</td>
</tr>
<tr>
<td>Clover Valley Shredded White Chicken</td>
<td>Spider-man Headphones — Tech2Go/Tech 2 Go, LLC</td>
</tr>
<tr>
<td>Cool Gear Double Wall Insulated Bottle — Cool Gear International, LLC</td>
<td>Super Realz Crocodile — Hedstrom</td>
</tr>
<tr>
<td>Fashion Choker, 5 pack — Old East Main Co.</td>
<td>Travel Coffee Cup — Old East Main Co.</td>
</tr>
<tr>
<td>Glad for Kids! Soak Proof Bowls — Brand Buzz LLC</td>
<td>Tutu Cute Set! — All Dressed Up! to Shine</td>
</tr>
<tr>
<td>Happy Easter Hand Sanitizer — Elegant HeadwearCo., Inc.</td>
<td>Twist &amp; Shake Rattle — cribmates/Regent Baby Products Corp.</td>
</tr>
<tr>
<td>kidentials bow — Kidentials</td>
<td>Vinyl Tablecloth with Flannel Back — Trueliving</td>
</tr>
<tr>
<td>Marvel PET Bottle — Zak Designs, Inc.</td>
<td>Wacky Lips — Jokes &amp; Gags/Ja-Ru Inc.</td>
</tr>
<tr>
<td>Metallic Bead Necklaces — 321 Party/Old East Main,Co.</td>
<td>Water Teether — Swiggsles</td>
</tr>
<tr>
<td>Mighty Mustache — Ja-Ru Inc.</td>
<td>9 in. Round Cake Pan — True Living</td>
</tr>
<tr>
<td>Non-Stick Fry Pan Set — Evolution</td>
<td></td>
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</table>

TOXIC CHEMICALS IN DOLLAR STORE PRODUCTS
DOLLAR GENERAL PRODUCT HIGHLIGHTS

ORVILLE REDENBACHER’S POPCORN

Retailer: Dollar General  
Retailer State: California  
Chemicals of concern: 625 PPM Total Fluorine (PFAS grease-proof coating present)

TRUE LIVING 9 IN. ROUND CAKE PAN

Retailer: Dollar General  
UPC: 7286701468  
Retailer State: Michigan  
Chemicals of concern: PTFE (PFAS Fluoro-polymer) + PES (Polyethersulfone)

WACKY LIPS

Retailer: Dollar General  
UPC: 7565601355  
Retailer State: California  
Chemicals of concern: PVC (>50% chlorine), DOTP Plasticizer
CLOVER VALLEY SHREDDED WHITE CHICKEN

Retailer: Dollar General  
Brand/Distributor: Clover Valley, Old East Main Co.  
UPC: 1972216724  
Retailer State: California  
Chemicals of concern: PVC copolymer coating on interior of the can

EVOLUTION NON-STICK FRY PAN SET

Retailer: Dollar General  
UPC: 635928028104  
Retailer State: Michigan  
Chemicals of concern: BPA-based Epoxy Coating

PURCHASE RECEIPTS

Retailer: Dollar General  
UPC: N/A  
Retailer State: Multiple  
Chemicals of concern: All receipts tested positive for Bisphenol S
ACKNOWLEDGEMENTS

The Campaign for Healthier Solutions is a project of the Environmental Justice Health Alliance for Chemical Policy Reform and Coming Clean. We would like to recognize the anchor groups, affiliates, and partner organizations that were essential in moving this project forward. Their continued commitment to protect Environmental Justice Communities has made the campaign’s progress over the years possible.

We also would like to give a special mention to the Ecology Center Healthy Stuff Lab for testing the products we purchased, then compiling, analyzing, and explaining the data for this report. We have worked with them numerous times in the past and look forward to future collaborations.

CAMPAIGN FOR HEALTHIER SOLUTIONS
ANCHOR GROUPS
Los Jardines Institute – Albuquerque, New Mexico
Líderes Campesinas – Oxnard, California
Harambee House – Savannah, Georgia

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Physicians for Social Responsibility-LA – Los Angeles, California
Learning Disabilities Association of Maine – Windham, Maine
Environmental Defence Canada – Toronto, Canada
Clean Production Action

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