

MICHIGAN

MANUFACTURING

TECHNOLOGY

CENTER

M A N U F A C T U R E   S M A R T E R

This guide is meant to serve as a reference for purchasing Personal protective equipment (PPE) during the COVID-19 crisis. Where possible, we've tried to source Michigan produced PPE. We have made every effort to identify legitimate vendors, distributors, and products, Michigan Manufacturing Technology Center is in no way endorsing a vendor, distributor, or product. Companies and individuals purchasing PPE should conduct their own validation of products and services before making purchases.

Last Updated: 05/15/2020

# Face Masks - Disposable

Domestically produced, certified, N95 and surgical masks are being routed to medical facilities and first responders; imported masks are likely to be the only disposable masks consumers will be able to find at resellers. If you are uncomfortable with using imported masks, consider sewn, cloth masks.

Milton Manufacturing

[www.miltonmfg.com](http://www.miltonmfg.com)

313-366-2450

Jim Green

313 407-3138



## DISPOSABLE PROTECTIVE MASK MADE FROM AMERICAN MATERIALS IN CHINA

AMERICAN STANDARD  
ASTM F2101-14

**BFE 95%**  
BACTERIAL FILTRATION EFFICIENCY  
**PFE 95%**  
PARTICLE FILTRATION EFFICIENCY

### MAIN RAW MATERIAL:

PFE99 MELTBLOWN FABRIC, SPUNBOND NONWOVEN FABRIC

MASK SIZE: 17.5CM\*9.5CM

**AVAILABLE: 480,000** **IN STOCK**  
**MINIMUM ORDER: 20,000**  
**DETROIT, MICHIGAN**

MILTON MANUFACTURING

301 East Grixdale, Detroit MI 48203 • [www.miltonmfg.com](http://www.miltonmfg.com) • 313.366.2450

Great Lakes Filter

33 Bloomfield Hills Pkwy Suite 120a,  
Bloomfield Hills, MI 48304

[info@greatlakesfilters.com](mailto:info@greatlakesfilters.com)

(800) 521-8565

<https://www.greatlakesfilters.com/flat-face-masks/>

Flat Masks and KN95



## Face Masks - Disposable (continued)

<p>detroitbikes.com Zakary Pashak (313) 815-9886 Have KN95 but not 3M - currently have 40,000 , total order of 300,000. Min order 500 min.</p> <p>I have N95 and KN95 masks arriving daily. I've brought in about 175,000 so far- they sell the minute they arrive.</p>	
<p>AHB Tooling &amp; Machinery 15300 Martin Road Roseville, MI 48066</p> <p><a href="https://www.ahbinc.com/">https://www.ahbinc.com/</a> 800-991-4225</p> <p>can get up to 3,000 N99 masks at a time. They're \$5.95 each.</p>	

# Contactless Thermometer



## No-Touch Thermometers Available from STEWART Industries

STEWART Industries, a minority-owned manufacturer in Battle Creek, has no-touch thermometers in stock and available for purchase.

Cost per unit is \$80 for tax-exempt organizations, \$84.80 with tax. They accept cash, check or charge card (with an additional fee to cover the credit card processing fee).

For more details or to place an order, please contact STEWART's HR Manager Tiffany Daniels by phone at 269-660-9290 x100 or by e-mail at [tdaniels@stewartindustriesusa.com](mailto:tdaniels@stewartindustriesusa.com).



## Face Masks – Sewn

Detroit Sewn in Pontiac

Detroit Sewn in Pontiac

<https://www.detroitsewn.com/>

We currently offer three versions of our washable, reusable fabric masks:

1. Standard face mask with twill ties
2. Standard face mask with elastic
3. Face mask with pocket for filter and elastic

Our masks are made with 100% tightly woven cotton fabric, and 100% cotton twill ties or latex-free elastic. The masks have pleats to allow for different face sizes, plastic coated wire at the top to form around the nose, and no gaps between the mask and the face.

2-ply



Standard Face Mask with Twill or Elastic



Face Mask with Filter Pocket & Elastic

[softgoodsdetroit.com](https://softgoodsdetroit.com)

Josh York

(734) 394-7408

<https://softgoodsdetroit.com/products/3ply-expandable-isolation-mask>

3-ply



## Face Masks – Sewn (continued)

eissmann.com Matt Brown (248) 705-6368 Not certified - currently doing 1400 day capacity at 2400	
--	--

Freeman Manufacturing jacqueline@freemanmfg.com <a href="http://www.freemanmfg.com">http://www.freemanmfg.com</a> Jacqueline Harrison (269) 651-2371 Currently producing hospital gowns, Non- certified masks	
---	--

detroitdenim.com Eric Yelsma (313) 932-0486 Gowns - disposable 3 piece hospital gown. masks - folded standard mask, Face Shield - Ploy film with foam band, basic splashguard.	
---	--

# Face Shields

RCO Engineering  
jeff.simek@rcoeng.com  
<http://www.rcoeng.com>  
Jeff Simek  
(586) 415-4707

Order Quantity	Piece Price
50-100	\$6.98
1,000+	\$5.21
10,000+	\$3.98
100,000+	Call for Pricing



- 9 1/2" Length by 9 1/2" Wide Lens
- One Size Fits Most
- Clear Lens
- Polypropylene Headband
- Elastic Strap
- Latex-Free
- Non-Sterile
- Splash Protection Eye Wear/Splash Guard Only Safety Shield
- Made in the U.S.A.

Sutherland Felt Co. &  
Sutherland Sewing Co.  
[sutherlandfelt.com](http://sutherlandfelt.com)  
Bob Spencer  
(248) 280-0450  
<https://sutherlandfelt.com/face-shields/>

Clear .020" PETG face shield –  
approx. 13" W x 7.5" H (flat  
dimension)  
Adjustable hook & loop  
headband  
1" Foam forehead piece –  
allows shield to go over  
glasses

\$7





## Face Shields (continued)

Vincent Rubino  
Branch Manager  
Office: 248-299-9500  
Direct: 248-293-1403  
Email: rubino.v@totalplastics.com  
Three designs:  
    Disposable: \$6  
    Reusable w/ 1" foam: \$7  
    Extended use: \$8.50


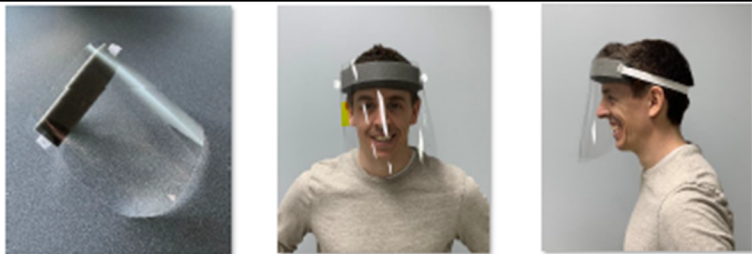
Plastic shields are also available in bulk for those wanting to assemble their own shields.

**Total Plastics is also making polycarbonate and acrylic partitions.**





## Face Shields (continued)

<p>Jeff Nelson Advanced Engineering Manager M: +1 586-216-6713 15030 23 Mile Rd Shelby Twp., MI 48315 E-mail: <a href="mailto:JNelson@Centuryplastics.net">JNelson@Centuryplastics.net</a> <a href="http://www.cieautomotive.com">www.cieautomotive.com</a></p> <p>They are \$2.10ea plus sales tax and shipping. Minimum order is 100pcs. Each carton holds 100pcs and we only sell in full box quantities.</p> <p>We have capacity for 25,000 a week. Shields include an anti-fog coating on one side and come with a comfort fit low density PUR foam headband.</p>	 <p><u>Face Protection System</u></p> <p>11" Splash Shield Kit Material: 0.020" Anti-Fog APET Plastic Shield Comfort Fit Low Density PUR Foam Headband</p>										
<p>Bambi Hollingsworth, CPIM Vice President of Manufacturing O: (616) 748-6248 C: (616) 648-6626 <a href="mailto:bhollingsworth@primera-inc.com">bhollingsworth@primera-inc.com</a></p> <p>Already used by several hospital groups and counties</p> <ul style="list-style-type: none"> <li>• Covers entire face</li> <li>• Latex Free (Not made with natural rubber latex)</li> <li>• Durable shield material</li> <li>• Can be worn with or without glasses</li> <li>• Fog resistant</li> </ul>	 <table border="1"> <thead> <tr> <th>Standard Pack</th><th>Bulk Pack</th></tr> </thead> <tbody> <tr> <td>Packaging: 20 /CS</td><td>Packaging: 96 /CS</td></tr> <tr> <td>Unit Price: \$3.75</td><td>Unit Price: \$3.70</td></tr> <tr> <td>MOQ: 900 Units</td><td>MOQ: 1536 Units</td></tr> <tr> <td>Item Number: FACE SHIELD</td><td>Item Number: FACE SHIELD-B</td></tr> </tbody> </table> <p>The minimum order quantity is a skid quantity, but we have been letting local companies come and pick up a box or two as needed.</p>	Standard Pack	Bulk Pack	Packaging: 20 /CS	Packaging: 96 /CS	Unit Price: \$3.75	Unit Price: \$3.70	MOQ: 900 Units	MOQ: 1536 Units	Item Number: FACE SHIELD	Item Number: FACE SHIELD-B
Standard Pack	Bulk Pack										
Packaging: 20 /CS	Packaging: 96 /CS										
Unit Price: \$3.75	Unit Price: \$3.70										
MOQ: 900 Units	MOQ: 1536 Units										
Item Number: FACE SHIELD	Item Number: FACE SHIELD-B										

## Face Shields (continued)

<https://www.sisuguard.com/sisu-medical-face-shield/>

Minimum order of 10 units. For bulk orders please email [ppe@sisuguard.com](mailto:ppe@sisuguard.com)

Reduce the risk of exposure by separating the medical professional from the patient with the SISU Medical Face Shield.

Details:

13" Elastic Headband

1" Forehead Standoff

13" x 9" Area Of Coverage

.018" Thick Prime APET

Anti-Fog

\$7.50



Arbor Apothecary

<https://arborapothecary.com/>

Arbor Apothecary is a manufacturer of personal protective equipment, created by the team at Adaptive Energy, a fuel cell battery manufacturer in Ann Arbor. We created Arbor in response to desperate pleas from medical professionals across the country for PPE.

Easy to assemble kits

Staple the elastic strap to the edges of plastic shield.

Remove the paper backing from the self-stick foam pieces and stick to the plastic shield.

Also producing hand sanitizer.



## Face Shields (continued)

<p><a href="https://www.cieautomotive.com/en_US/-/cie-usa">https://www.cieautomotive.com/en_US/-/cie-usa</a></p> <p>I'm Jeff Nelson at CIE USA in Shelby Twp. We can supply 25,000 face shields a month. We also have over 100 injection molding machines sitting idle. If you need help with molding or to buy face shields please contact me at <a href="mailto:jnelson@centuryplastics.net">jnelson@centuryplastics.net</a> or 248-320-0524</p>	
<p>DEP and partner Suppliers can provide Face Shields at volumes of up to 3,000 per day and about 12 day lead time to deliver.</p> <p><a href="mailto:john_gelmisi@depusa.com">john_gelmisi@depusa.com</a> 248 219 9838</p>	
<p>Steelcase Grand Rapids location only</p> <p><a href="https://www.steelcase.com/covid-19/">https://www.steelcase.com/covid-19/</a></p>	

# Gloves

Disposable gloves are best located through your existing consumables/office supplies provider. Many suppliers are prioritizing existing customers first.

Gloves by Web

<https://glovesbyweb.com/>

The disposable gloves division of Auric Enterprises, Inc. A Michigan-based corp. Offers a variety of exam gloves for medical and non-medical applications

Due to increased demand, processing and shipping of all in stock orders is at least 10-14 days. Backordered items are projected to be *at least* 30-60 days delayed.

**Orders can be placed online or by calling 877-932-4568**



Tri-Chem

<https://www.tri-chem.com/product/disposable-gloves/>

powdered and non-powdered versions and meet all FDA and ASTM requirements.  
800.456.6255



# Hand Sanitizer

[https://www.michigan.gov/lara/0,4601,7-154-89334\\_10570\\_90824-522352--,00.html](https://www.michigan.gov/lara/0,4601,7-154-89334_10570_90824-522352--,00.html)

All TTB-permitted DSPs may manufacture hand sanitizer products that are comprised of:

- denatured or undenatured ethanol
- glycerol (not less than 1.45% of the finished hand sanitizer product on a volume basis), and
- hydrogen peroxide (not less than 0.125% of the finished hand sanitizer product on a volume basis)

Hand sanitizer is readily available from local breweries typically in gallon jugs; locate one close to you by search the web. Shipping of a flammable liquid can be expensive so locating a supply near you can be both timely and less expensive.

Arbor Apothecary

<https://arborapothecary.com/>

Arbor Apothecary is a manufacturer of personal protective equipment, created by the team at Adaptive Energy, a fuel cell battery manufacturer in Ann Arbor. We created Arbor in response to desperate pleas from medical professionals across the country for PPE.

Active Ingredients: 80% ethanol alcohol by volume in an aqueous solution. Inactive

Ingredients: Distilled Water, Glycerin, Hydrogen Peroxide.

Also producing Face shields.



Atwater Brewery

<https://www.atwaterbeer.com/>  
atwater@atwaterbeer.com

\$4 4 oz bottles, case of 54 for \$200 and \$30 gallons. They are ordered single or case of 4



## Hand Sanitizer (continued)

### **Detroit Bus Company**

**Medical-grade hand sanitizer  
manufactured to World Health  
Organization standards**

We are currently offering quarts, half  
gallons and gallon jugs.

**Here's what's inside:**

**80.00 % Alcohol** to kill viruses and  
bacteria.

**1.45% Food-grade glycerin** to make your  
hands soft and smooth.

**0.12% Hydrogen peroxide**

**18.43% Distilled water**

<https://thedetroitbus.com/product/bulk-hand-sanitizer-from-the-detroit-sanitizer-company/>



JOURNEYMAN DISTILLERY  
109 GENERATIONS DRIVE  
THREE OAKS, MI 49128  
269-820-2050

<https://www.journeymandistillery.com/>

We are offering an 80% alcohol  
formulation approved by the World  
Health Organization, available in sizes  
from 1.75 liter bottles up to a 270  
gallon tote. Please note that these are  
“refill” style containers. No pumps are  
currently available.



## Hand Sanitizer (continued)

Plymouth Technology

<http://plymouthtechnology.com/>

248.537.0081

Chemical company now makes FDA approved  
EUA hand sanitizer using ethanol

5 gallon buckets

55 gallon drums

Some products donated to hospital, some sold  
retail. Product is branded HavaClean. Company  
will continue to make after restart.





# Hospital Gowns

Detroit Sewn in Pontiac  
Detroit Sewn in Pontiac  
<https://www.detroitsewn.com/>

## ONE-SIZE ISOLATION GOWNS

Washable. Reusable. Made from a level 4 barrier fabric.

Also producing 2-ply cloth face masks.

### ONE-SIZE ISOLATION GOWNS

Washable. Reusable. Made from a level 4 barrier fabric.



Vaughn Custom Sports  
550 S. Glaspie Street  
Oxford, MI 48371  
586-243-1345 (c)  
248-969-8956 (o)  
Arlene Vaughn  
[avaughn@vaughnhockey.com](mailto:avaughn@vaughnhockey.com)

More pictures of the gowns are on our website at  
<http://www.vaughnhockey.com> as well.

The gown is made out of 210 Denier Nylon with a water resistant urethane coating on the back surface that makes it extremely fluid resistant and it is sewn with lock stitch construction.

Size 1 XS-XL: \$18/gown

Size 2 XXL: \$20/gown

Colors may vary.



## Hospital Gowns (continued)

detroitdenim.com Eric Yelsma (313) 932-0486 Gowns - disposable 3 piece hospital gown. masks - folded standard mask, Face Shield - Ploy film with foam band, basic splashguard.	
Freeman Manufacturing jacqueline@freemanmfg.com <a href="http://www.freemanmfg.com">http://www.freemanmfg.com</a> Jacqueline Harrison (269) 651-2371 Currently producing hospital gowns, Non- certified masks	

## Barriers (Sneeze Guards)

<p><b>Total Plastics</b> <a href="http://www.totalplastics.com/">www.totalplastics.com/</a> Vincent Rubino Branch Manager Office: 248-299-9500 Direct: 248-293-1403 Email: <a href="mailto:rubino.v@totalplastics.com">rubino.v@totalplastics.com</a></p> <p>polycarbonate and acrylic partitions</p> <p><b>Total Plastics is also making face shields.</b></p>	
<p>Eagle Technologies <a href="http://www.eagletechnologies.com">www.eagletechnologies.com</a> Brandon Fuller <a href="mailto:b.fuller@eagletechnologies.com">b.fuller@eagletechnologies.com</a></p> <p>Barriers and isolation cubes</p> <p>Company is also making face shields</p>	
<p><a href="http://sightlinedisplay.com">sightlinedisplay.com</a> Brian Cole (616) 784-4488 Barriers (sneeze guards) ; Signage ; Displays</p>	

## Building/Surface Sterilization and Cleaning

Antimicrobial service Chase Matson Premium services 248-350-2255  <a href="http://www.premiumservicesinc.com/default.aspx">http://www.premiumservicesinc.com/default.aspx</a>	Surface Anti-Bacterial covering Clorox 360 fogging  Building and Grounds services
--	--

Fogging Becky Arnold A&C Property services 810-620-8371  <a href="https://www.cleanaci.com/">https://www.cleanaci.com/</a>	Clorox 360 fogging  Building cleaning services
---	--