Distillers around the country are using their alcohol supply to churn out hand sanitizer as Americans scramble to find the cleaner, a tool in fighting the coronavirus.

U.S. consumer demand for hand sanitizer outpaced supply weeks ago, as Americans raced to stock up and the biggest U.S. brand—Gojo Industries Inc.’s Purell—focused its supply on hospitals and other establishments.

“We have the processing equipment, and we know the skill sets, and we have the people,” said Chad Butters, chief executive of Eight Oaks Farm Distillery in New Tripoli, Pa. “Let’s get to work making this. We are just going to push it out.”

Eight Oaks recently turned its production line from whiskey and vodka to hand sanitizer. The company is giving out its hand sanitizer to local nonprofits and community members for a donation.

The distillery joins a growing number that have set up sanitizer-making operations, either using excess alcohol or temporarily halting production of their spirits. Companies in towns from Portland, Ore., to Durham, N.C., are churning out sanitizer.

In the U.S., the Food and Drug Administration regulates production of sanitizer and generally requires the product to be inspected before it is sold to the public. The Centers for Disease Control and Prevention recommends hand sanitizer contain at least 60% alcohol, a far greater concentration than liquor sold to consumers.

The Alcohol and Tobacco Tax and Trade Bureau has exempted spirits companies from getting authorization typically required to manufacture hand sanitizer. The FDA said last week that it wouldn’t take action against any company that produces alcohol-based hand sanitizers for use by consumers or health-care personnel.

Distillers had been finding ways to work around restrictions, including donating rather than selling sanitizer, or calling it something other than hand sanitizer.

For instance, Los Angeles spirits maker Amass was selling “alcohol-based hand wash” on its website, alongside dry gin and Copenhagen Vodka. The company will now call the product hand sanitizer.

“It needed to go to market immediately,” said Morgan McLachlan, Amass co-founder and chief product officer. Ms. McLachlan is eight months pregnant and got the idea to make sanitizer a few weeks ago when she was unable to find any in stores for herself.

The company, which specializes in botanical-based spirits, was already preparing to launch a personal-care line, so making the jump to sanitizer was easy, she said. A 16-ounce bottle costs $38, compared to an 8-ounce bottle of Purell, which costs about $3 at major retailers.

Tito’s Handmade Vodka, based in Austin, Texas, spent weeks warning consumers against using the liquor to protect against the coronavirus because it is comprised of only 40% alcohol. On Sunday, the company said it is working to begin production of hand sanitizer.

At least one larger competitor is making the change as well. Pernod Ricard SA, the French spirits giant, is making sanitizer at its plants on both sides of the Atlantic and supplying alcohol for others to make the product. The effort includes whiskey distilleries for the brands Rabbit Hole in Kentucky, Smooth Ambler in West Virginia and TX Whiskey in Texas.

Other unexpected industries are also dedicating production lines to making hand sanitizer. Lawrence Rosen, chairman of LaRose Industries LLC, said his toy company, which makes products such as Cra-Z-Art slime and glue, is converting some liquid-filling machines at factories to make hand sanitizer packaged under the LaRose brand.

“IT’s in tremendous demand from all retailers,” Mr. Rosen said.

-Austen Hufford and Paul Ziobro contributed to this article.