

Dangers of Hand Sanitizer

Hand Sanitizer is recommended by the Government of Canada as means to disinfect clean hands to prevent the spread of COVID-19. A list of [Hand Sanitizers](#) authorized by public health is available.

Hand Sanitizers approved by Public Health will contain a label with warnings to include:

- For external use only.
- When using this product avoid contact with eyes. If contact occurs, rinse thoroughly with water.
- Stop use and ask/consult a doctor/physician/health care practitioner/health care provider/health care professional if irritation develops.
- Keep out of reach of children. If swallowed, call a poison control centre or get medical help right away.
- **Flammability warning:** Keep away from open flame and sources of heat.

The Flammability warning should be taken quite seriously. The [World Health Organization](#) (WHO) has recognized hand sanitizer as a potential fire hazard due to its high alcohol or ethanol content. A small amount can ignite and burn very hot and burn very quickly which can result in burn injuries or damage to property.

Most common hand sanitizers have a flashpoint between 21 to 24 degrees Celsius some are lower. Flashpoint is the lowest temperature that vapours of chemicals can ignite in air when exposed to heat or flame. Farm equipment and vehicles as well as environmental temperatures can get much higher than this during the summer months.

The Safety Data Sheet for hand sanitizer, if available, will note the flashpoint under the section called Physical Data. Not handling or storing hand sanitizer according to the label or safety data sheet can result in fire or burns

On farm considerations and control measures should be taken to prevent hand sanitizer fires or workers burning their hands when it is applied. Typically, hands are rubbed together when it is applied and this can cause enough friction to ignite the hand sanitizer in extreme temperature conditions. Workers who light a cigarette after application without allowing it to dry first, can ignite the hand sanitizer and suffer burns. It is difficult to see it burning, as it burns clear.

Recommendations for safe use, storage and handling to prevent injury or property damage:

1. Conduct a hazard assessment for the product used on your farm.
2. Find a substitute for hand sanitizer that has a much higher flash point or another product that can provide similar protection.
3. Increase hand washing frequency and avoid the use of hand sanitizer, where possible.
4. Store large quantities of hand sanitizer according to the National Fire Protection Code 30 for Flammable Liquids, at lower temperatures than the flashpoint, and in a secure location.
5. Keep dispensers in open areas.
6. Keep it out of direct sunlight and extreme heat. Do not keep in equipment cabs or inside vehicles.
7. Develop an emergency response plan for fires, spills, and releases. Use the Safety Data sheet to develop these plans and National Fire Protection Code 30 for Flammable liquids.
8. Allow hands to dry thoroughly after application before coming in contact with sources of ignition.

Take a look at this [Video](#) from the National Fire Protection Association.