

## Hand Sanitizer Hazards at Home and Work

September 2020



**Burns caused by a fire from hand sanitizer ignition**

An employee used alcohol-based hand sanitizer, according to current recommendations for COVID-19 personal hygiene.

After application, but before the liquid sanitizer had fully evaporated and dried, the individual touched a metal surface where a build-up of static created an ignition source. The sanitizer ignited, resulting in an almost invisible flame on both hands. The individual managed to extinguish the flames but was left with 1<sup>st</sup> and 2<sup>nd</sup> degree burns.

Ref: International Association of Oil & Gas Producers (IOGP) Alert 314 IOGP Safety. (<https://safetyzone.iogp.org/>).

There have also been cases where shortly after applying hand sanitizer, the person lit a cigarette and their hands were engulfed in flames.

### Did You Know?

- Some hand sanitizers are alcohol-based and are flammable with flashpoints of 62 to 80°F (16.6 to 26.7°C). Once above the flashpoint, the vapors only need an ignition source to start burning.
- Many hand sanitizer solutions have a Safety Data Sheet (SDS) that list hazards and precautions including flashpoint.
- Hands wet with alcohol-based sanitizer can be ignited by a static spark or any other ignition source. People can carry a static charge large enough to ignite flammables.
- Alcohol fires burn with a very light blue flame that are hard to see. Water can quickly extinguish a small alcohol fire.
- Some hand sanitizers contain methanol or methyl alcohol<sup>1</sup> which is flammable and toxic. Do Not Use these on your skin!

1. <https://www.fda.gov/drugs/drug-safety-and-availability/fda-updates-hand-sanitizers-methanol>

### What Can You Do?

- When using alcohol-based lotions or sanitizers, allow them to completely dry before doing other tasks that may ignite them.
- Read the SDS for all materials you handle even those that are seemingly harmless.
- Store alcohol-based hand sanitizers according to the SDS and away from light and heat sources which can increase flammability and reduce their effectiveness.
- Share this information with your family and friends so they do not have a similar incident.

**Handle all materials safely, even those meant to keep you safe!!**