



Dangerous Goods Safety Bulletin No. 0120

Safety considerations for alcohol-based hand sanitisers

Background

During the COVID-19 pandemic, most people are practising good hand hygiene by regular washing with soap and water and supplementing this with the use of hand sanitisers.

Hand sanitisers are available in a gel, liquid or foam mixture, and when applied as directed, are safe to use and keep our hands clean.

Many hand sanitisers contain either ethyl alcohol (ethanol) or isopropyl alcohol (propanol).

Summary of hazard

Alcohol-based hand sanitisers contain very high percentages of ethanol and isopropyl alcohol. These types of alcohol are classified as flammable liquids, so they both present a fire hazard.

The flash points of ethanol (80 per cent volume by volume) and isopropyl alcohol (75 per cent volume by volume) are 17.5°C and 19°C, respectively.



Contributory factors

People are unaware that alcohol-based hand sanitisers are flammable and may not take the right precautions for safe use and storage.

Actions required

1. Keep hand sanitisers out of reach of children.
2. Keep containers tightly closed when not in use.
3. Keep away from heat, sparks, open flames, hot surfaces etc. No smoking.
4. Use hand sanitisers in a ventilated space – do not use liquid sanitiser inside confined spaces without plenty of ventilation when applying (e.g. inside cars without windows down).

5. Do not keep hand sanitisers inside cars during warm or hot weather.
6. Keep away from oxidizing agents (e.g. granulated pool chlorine).
7. After applying hand sanitiser, make sure your hands are completely dry before touching anything else, to minimise the risk of electrostatic discharge and vapour ignition.
8. Hand sanitiser dispensers should not be placed above or close to potential sources of ignition, such as light switches and electrical outlets, or next to oxygen cylinders, due to the increased risk of vapour igniting.

Further information

- Standards Australia, www.standards.org.au
AS 1940 *Storage and handling of flammable and combustible liquids*
- World Health Organization, www.who.int
Alcohol-Based Handrub Risks/Hazards, www.who.int/gpsc/tools/faqs/abhr2/en/
- Australian Competition and Consumer Commission
COVID-19: Supplying hand sanitiser, www.productsafety.gov.au/news/covid-19-supplying-storing-using-hand-sanitiser
COVID-19: Safer packaging and labelling guidance for hand sanitiser suppliers, www.productsafety.gov.au/news/covid-19-safer-packaging-and-labelling-guidance-for-hand-sanitiser-suppliers

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