

Information Bulletin

Strategic and Tactical Guidance for Incidents Involving Isopropyl Alcohol

Isopropyl Alcohol (IPA) is one of the main ingredients in hand sanitizer. IPA is used as the disinfectant and is mixed with other non-flammable materials. IPA is being shipped in bulk containers, typically tank trailers, to facilities around the state involved in the production of hand sanitizer. Pre-mixed hand sanitizer is also being shipped in bulk containers, including 300-gallon totes. This mixture is typically 75% IPA.

Isopropyl Alcohol is a Class 3 flammable liquid and additionally is a Polar Solvent. This means it can burn and mix easily with water. The flashpoint is 53 deg. F so it should be considered easily ignited and Highly Flammable.

Use the following information should a spill or fire occur:

- Verify placard number on tank UN ID is 1219 for IPA, 1993 for Pre-mixed solution
- Utilize the Emergency Response Guidebook Guide 129
- For a spill or fire, isolate the area in all directions for 150 feet
- Stay Upwind and Uphill
- All personnel inside exclusion zone should wear structural PPE and SCBA
- Air monitoring should be conducted to protect personnel operating within the exclusion zone and to verify isolation distance
- If the Lower Explosive Limit (LEL) is at or above 10% = WITHDRAW FROM AREA
- If a life hazard exists: Focus available foam operations or use water fog patterns on alcohol fires to protect rescue operations. Water will NOT extinguish the fire or suppress vapors
- Conduct structural firefighting as necessary and from uphill and upwind if possible
- Beware of any running spill or spill fed fire which may cut off routes to safe zones
- Consider defensive operations once life hazard is addressed

For Firefighting and Vapor Suppression:

- Class B firefighting foam with Alcohol Resistance must be used for extinguishment or vapor suppression. Plain water and wetting agents will not suppress the alcohol vapors
- Alcohol Resistant AFFF can be used for emergency situations
- For a spill or fire, use the following to determine amount of foam solution:
 - Spill Area (ft²) X Application Rate (0.2 gpm/ft²)= GPM Foam Solution x 15 mins
- If spill is in a diked area, increase application time to 20 mins
- Concentration percentages will vary by brands. Utilize highest percentage indicated by foam manufacturer, usually 3% or 6% for eduction rates
- If using portable eductors, most require 200 psi inlet pressure to operate correctly. Check your foam equipment for correct operating pressures
- Nozzles must match GPM of foam educator. A 125 gpm educator requires a 125 gpm fog nozzle
- After foam has been applied, continue air monitoring. Reapply if LEL exceeds 10%

CONTACT NYS OFPC for 24 hr. Technical Assistance/Response: 518-474-6746