Nitric Acid Container

FAILURE NOTICE

**Identified Issue:** In the fall of 2019 and spring of 2021 the handle of a concentrated nitric acid container fell off while a researcher was moving the container. This resulted in nitric acid spilling onto the floor and in one case splashing on the leg of the researcher. In both instances, the nitric acid container was approximately two years past its expiration date.

**Details of Product:** Nitric Acid in a plastic bottle (this incident involved Fisher Chemical A509P - TraceMetal Grade).

The poly bottle is made from a special grade of High Density Polyethylene (HDPE). This grade of HDPE resin is more resistant to nitric acid than standard HDPE resin. The expiration date on TraceMetal Grade Nitric Acid, A509 (SEASTAR’s Instrument Quality Grade Nitric Acid products) is set to two years to ensure the integrity of the bottle is maintained and is still safe to use. Poly bottles will degrade with time, temperature, light exposure and laboratory storage conditions. **If the expiration date has passed then the bottle is no longer safe to use.** These two incidents involved SEASTAR products, but other manufacturers such as MilliporeSigma, Avantor, TCI, Alfa Aesar, and Honeywell may also have similar expiration dates.

**Action Needed:**

1. Review your inventory for this acid. Check the expiration date on the label. If the container is expired, immediately discontinue use, attach waste tag, carefully place in waste collection secondary containment, and submit a request to EHS for disposal. Maintain accurate inventories of all chemicals and routinely check for expiration dates.
2. Review emergency procedures with staff:
   a. Review your working alone procedures with your staff especially when hazardous chemicals are involved.
   b. Ensure staff understand they need to call for help prior to cleaning up a hazardous chemical spill. Vacate the lab and immediately call EHS for spill clean-up assistance. Hazardous chemical spill clean-up must never be done alone.

**Additional Information:**
