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Meet John Holpuch

In April, we welcomed John Holpuch to the IAT family. John serves as a Loss Control Specialist working remotely from Indianapolis. John’s responsibilities include specialty Loss Control survey work for Inland Marine and Property coverages.

He has a degree in Safety from Illinois State University and began his career in 1987 working for national multi-line insurance carriers handling multi-line Loss Control assessment and service.

John was born in and raised in the Chicago area, but has resided in Indianapolis since 1991. John and his wife Donna have been married for 33 years and have three adult children and one grandson. Outside of work, John enjoys playing golf and fishing.

Please join us in welcoming John Holpuch to the IAT family.
Flammable and combustible liquids are present in nearly all places of business. Gasoline, diesel fuel, paints, thinners, solvents, adhesives, windshield washer fluids, and oils may be flammable or combustible. If used or stored improperly, there is an increased risk of fire that will lead to property loss and even loss of life.

This article will outline some of the basics of flammable liquids storage and handling but not every possible scenario due to the many variables that may be involved. Businesses governed by OSHA are required to follow the applicable OSHA Standard 29 CFR OSHA 1910.106 – Flammable Liquids. The OSHA standard has been based off the National Fire Protection Association (NFPA) standard, NFPA 30 – Flammable and Combustible Liquids code which is also recommended to be followed.

NFPA and OSHA have classifications and categories of flammable and combustible liquids, but as a general rule, “flammable” liquids are those having flashpoints below 100 Degrees F and "combustible" liquids are those having flashpoints at or above 100 Degrees F in closed cup testing methods. Check your Safety Data Sheets (SDS) on your products to determine what products are flammable or combustible.

Safe storage of flammable and combustible liquids will depend upon the classification of the liquid and amounts stored. Smaller quantities of flammables can be safely stored in “flammable storage cabinets” designed in accordance with NFPA 30. Larger quantities may require a dedicated storage room designed to NFPA standards that include such items as fire rated enclosure/door, spill containment, ventilation and explosion proof electrical systems. Combustible liquids such as motor oil and grease do not require the same level of protection. Quantities of flammable and combustible liquids for immediate use can be kept outside the storage described.

Dispensing flammable and combustible liquids through a pipe or through the air, static charges can accumulate. Grounding and Bonding is necessary during the transfer of flammable liquids having a flashpoint below 100 Degrees F to prevent a static spark from igniting the flammable vapors. If dispensing or mixing in enclosed rooms, there is a probability of flammable vapor accumulation and electrical systems in that room should meeting the requirements of OSHA and NFPA standards for class I, division I (explosion proof). This would include equipment in such rooms such as pumps, compressors, or fans. In open areas, any sources of ignition should be removed from areas where vapors may travel or accumulate.

Flammable liquids dispensed from small containers should be from safety cans which are listed containers with capacity of no more than 5 gallons that has a spring-closing lid and spout cover designed to safely relieve internal pressure when exposed to fire.

Spraying of flammable and combustible liquids should be in a standard spray booth or other safe area in accordance with NFPA 33 – Standard for Spray Application Using Flammable or Combustible Materials. Booths should be protected by automatic sprinkler systems or other approved extinguishing system. If using small aerosol cans for spray painting outside a standard booth, it should be in a well-ventilated space, at least 20 feet horizontally and 10’ vertically from electrical or other equipment in accordance with NFPA 33.

Warehousing of flammable or combustible liquids may require special protection and/or segregation from other stock. Consult NFPA 13 – Standard for Installation of Automatic Sprinkler Systems and NFPA 30 for standards pertaining to this exposure or consult your local IAT Loss Control Representative. NFPA 30B is the Code for Manufacture and Storage of Aerosol Products and should be consulted for more than just incidental aerosol product warehousing.
Please remember this is intended to cover just some of the basics involving flammable and combustible liquids. For more information please refer to the applicable standard or code.

If you have any questions concerning this article or other property fire safety issues, please contact John Holpuch, IAT Loss Control Specialist at john.holpuch@iatinsurance.com.

References
When thinking of cargo securement, it's instinctual to focus on flatbed or "un-sided" trailer types since cargo hauled on these trailers account for the majority of load securement violations. However, as a shipper, consignee, or motor carrier, opening the rear trailer doors of a dry van to see your cargo has shifted or has been damaged in transit is a sight no one wants to see. While the vast majority of shipments arrive at their delivery location in the same condition as when they were loaded, damaged van cargo can have significant impacts including the cost of replacing or repairing damaged goods, lost time in productivity, and damaged relationships with your customers.

The Federal Motor Carrier Safety Administration mandates that cargo be required to withstand the following three deceleration/accelerations, applied separately: 0.8 g (80% of the cargo's weight) deceleration in the forward direction; 0.5 g (50% of the cargo's weight) acceleration in the rearward direction; and 0.5 g (50% of the cargo's weight) in a lateral direction. While the types of cargo being hauled will vary greatly, below are tips and best practices on avoiding cargo claims and ensuring freight gets delivered in expected, undamaged condition.

**CARGO SECUREMENT TIPS:**

- Limit space between your cargo. An average or full van trailer load of palletized goods weighting between 30,000 to 40,000 pounds requires no additional securement in most cases and is needed as long as the following requirements are being met:
  - No spaces between the pallets and the side walls of the trailer.
  - No spaces between the front of the trailer to the rear trailer doors.

- Find some balance. If it's not a full van load, focus on ensuring that the load is as balanced as possible in the trailer. This can include a single file line down the middle of the trailer or cargo weight spread evenly on both the nose and the rear of the trailer.

- Heaviest items or pallets always go on the bottom.

- Secure the cargo. When there are spaces in the trailer, it is the driver and carrier’s responsibility to ensure that the cargo does not move by using proper blocking and bracing securement practices. This can include the use of nailed hardwoods, dunnage, airbags, friction mats, loads straps, load bars, or any other means available to prevent cargo from moving.
  - Use load-locking bars to provide vertical/horizontal support.
    - When cargo needs vertical securement, a load-locking bar will be pressed up against the cargo, and through a jacking device, create a tight wedge between the floor and ceiling of the van. The rubber feet at both ends of the bar prevent the bar from sliding out of place.
    - The same concept applies to cargo in need of horizontal securement with the bar fastened to the walls of the van.
  - Trailer walls cannot hold wood bracing. Do not nail anything to the trailer walls and instead use load bars, e-track straps, or airbags.
  - Make cargo securement training a focus in your new driver orientation program.
  - When ordering your next trailers, discuss the appropriate specifications with your vendor (such as the number of e-track or logistics track systems) that are necessary for the cargo you commonly haul.
  - Securing of van freight is often neglected due to the cargo inside a closed trailer not being visible. Proper securement that prevents van cargo from shifting is a vital part of remaining in regulatory compliance and lowering the chance of cargo damage.

**Sources**