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I spoke to Jim Klupar about the differences between AN and VCM. He preferred to give me a brief summary of the differences but said that if you feel an in-depth review is worthwhile, he'd be willing to help.

These are some chemical differences:

- (1) Vinyl chloride is a gas which boils at 7°F. AN is a liquid which boils at 171°F, and so it has a much lower vapor pressure.
- (2) AN has a greater affinity for water than VCM. This makes it more difficult to strip AN out of most products.
- (3) Both substances can be extreme fire and explosive hazards, but AN may be slightly more hazardous since it can't be neutralized by caustic soda as vinyl chloride can.
- (4) In making PVC, only one raw material, vinyl chloride, is used. In making a product such as nitrile rubber, three components are used; and in case of a leak it would be very difficult to tell whether AN, butadiene or styrene is involved. This means that portable analyzers for AN require more sophistication (except in fiber plants where only one material is of major importance).
- (5) AN can enter through the skin if there is contact. Vinyl chloride would probably burn the skin on contact.
- (6) When vinyl chloride is spilled on a material such as a leather shoe, it will evaporate. If AN is spilled on a leather shoe, it will soak into the material; and the shoe would have to be thrown away.

He also pointed out several differences in the two regulations:

- (1) All products with PVC must be labeled. The AN standard is more favorable here in terms of exceptions.
- (2) The AN standard is stronger in terms of protective clothing.
- (3) The medical surveillance requirement of the AN standard requires a proctosigmoidoscopy exam while the vinyl chloride rules require a standard blood check.
- (4) The standards differ in their definitions of emergencies.

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