
	<h1 style="color: red;">City of Madison Fire Department</h1>	
<b>Training Bulletin</b>	<b>December 2019</b>	
<b>National Foam Brand</b>	<b>Knockdown Class A Foam Concentrate</b>	<b>Fluorine Free Foam</b>

The Madison Fire Department is implementing the use of National Foam “Knockdown Class A Foam Concentrate” in all on-board foam tanks. This will replace FireAde 2000.

Basic Information:

- Knockdown by today’s standards is a Fluorine Free formulation by National Foam ([www.nationalfoam.com](http://www.nationalfoam.com))
- UL listed as a “wetting agent” at 0.3% for Class A and Class B.
- It reduces the surface tension of plain water which allows it to penetrate surfaces where water might normally run off, to reach deep-seated fires.
- Knockdown isolates the fuel by excluding oxygen, adhering to Class A materials, and penetrating faster than plain water, which means less water damage and less water required.
- This formulation can be up to five times more effective than plain water on Class A materials.
- Recommended concentrate storage temperatures 20F-120F. Knockdown is freeze/thaw stable and no performance loss is expected upon thawing.

Uses of Knockdown Class A Foam:

- Extinguishes fires with both Class A and Class B materials
- Contains NO alcohols for higher flash point and compatibility with Class A/B Systems
- **Knockdown should be used on class A fires and hydrocarbon spills ONLY.**
- **Class A Foam Concentrate Knockdown should never be used on polar solvent fires.**
- Special care should be used when using Knockdown on Class B fire spill situations. The utilization of air-aspirating nozzles, over non-aspirating nozzles, may offer more effective control of these situations.
- Apply foam during post-fire overhaul to improve air quality & reduce particulate contamination to firefighters

Application of Knockdown Class A Foam:

- APPLICATION RATE using the Husky Foam System
  - Class A Fires – start at .1 %, up to .03 %
  - Small Hydrocarbon Fires start at .3 up to .5%
    - It is advisable to use air-aspirated TFT attachment
- Fires with over 25 gallons of gasoline with ethanol blend will require application rate at 3%.
- Husky Foam System on all apparatus will be preset to .1%