The new Ice Age has arrived.



Stuck with a metal cutting fluid from another era?

Liquid Ice<sup>®</sup> coolants are environmentally responsible, highly biodegradable coolants that are alcohol and solvent free. They're water-soluble, non-hazardous, and leave no sticky residues or harmful fumes.

Liquid Ice<sup>®</sup> coolants are low foaming and clear in appearance, so they allow for greater visibility while you monitor your machining operations.



With Liquid Ice<sup>®</sup> coolants' ease of maintenance and proper

usage, it can last much longer in your machine sumps than oil based coolants.

It's no mammoth decision. Add Liquid Ice<sup>®</sup> coolants for your metal cutting needs.

And welcome to the New Ice Age.



The clear choice in metal-cutting fluids.



www.liquidicecoolant.com

## LIQUID ICE<sup>®</sup> VP MACHINING COOLANT AND LUBRICANT

**LIQUID ICE<sup>®</sup> VP** is an alternative to oil-based or semi-synthetic coolants. This fully water soluble coolant has superb cooling properties and very good lubricity. **LIQUID ICE<sup>®</sup> VP** has been engineered to be environmentally responsible and safe to operators. It does not create mists, vapors or odors.

- Excellent Anti-Foaming Characteristics, even under 1000 PSI high pressure applications.
- Increased Cooling Capability resulting in better Tool Life.
- VP is Clean and non-sticky eliminating the need of washing machined parts before painting, welding or heat treating.
- Long sump life thanks to state of the art biocide that, with good housekeeping, helps prevents bacteria and odors.
- Long lasting Corrosion Protection without the need of expensive tank side additives.
- Environmentally Friendly, and does not create mists in the air.
- Extremely Safe for Operators and Machinery, no solvents or dyes.
- Clear in appearance allowing full visibility of the machining process
- Value Priced to fit your budget

**Applications:** All machining applications involving ferrous and non-ferrous metals.

**Application Data:** LIQUID ICE<sup>®</sup> VP should be flooding the surface of the cutting tool and material to be machined at all times.

Recommended Dilution Rates:

Applications for Ferrous or Non Ferrous metals (aluminum, brass, steel or stainless) at 5% - 12% concentration or (19:1 - 7:1)

<b>Percentage</b>	<b>Dilution Ratio</b>	<b>Refractometer</b>
5%	19:1	1.2
6%	14:1	1.6
<mark>8%</mark>	<mark>11:1</mark>	<mark>2.0</mark>
10%	<mark>9:1</mark>	<mark>2.4</mark>
<mark>12%</mark>	<mark>7:1</mark>	3.2

It is recommended to initially charge the system at 10%, then gradually dilute with make up coolant once a baseline performance has been established. Each situation will vary depending upon the specific water-hardness, type of machining and application



**Environmental Data:** LIQUID-ICE<sup>®</sup> VP's ingredients are highly biodegradable according to EPA, DIN, ASTM, or standard methods, are harmless to the environment, and contain no hazardous or toxic materials.