

Blow snow, not your budget.

Technical Bulletin



What is DRIFT?

DRIFT™ is a patented, liquid snowmaking additive, formulated from an organo-silicone surfactant (surface-active-agent). DRIFT enhances snowmaking efficiency and snow product quality. It pours and mixes easily with water, does not require continuous mixing, has no offensive odor and does not require special storage. When used as directed DRIFT is safe for humans and the environment and degrades within a few days.

Who can benefit from DRIFT?

Anyone making snow, working with made snow, or managing snowmaking and grooming budgets.

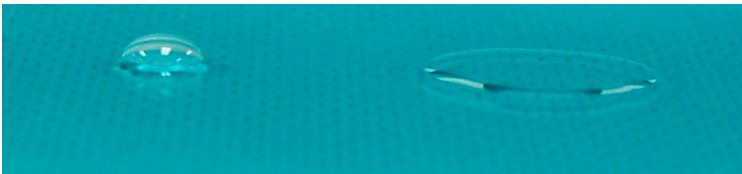
- DRIFT allows greater efficiency in snowmaking itself.
- It results in a ready-to-go-snow product that is easier to work with and does not leave a residue on blades, windshields, etc.
- DRIFT typically costs less per million gallons/ liters water than alternatives, and the lack of residue can reduce maintenance time – so it benefits whoever is responsible for budgets as well.

Why use DRIFT?

- To be able to operate when snowmaking temps are marginal. At marginal temps you are forced to operate at lower efficiency (more air, less water) or not at all; and often your groomers need to wait for the snow to cure before working it. DRIFT modifies the flow dynamics of snowmaking water so it freezes faster and more thoroughly. This means you can operate more efficiently at marginal temperatures and make snow that is ready to be worked – ready-to-go-snow - much sooner than it would be without DRIFT.
- To increase your snow quality and operating efficiency at mid-range temperatures. Even when temps are decent – you may have to wait for the snow to cure before working it if you are using other additives or none at all. Time is money. DRIFT's modification of the flow dynamics and freezing of water provides operating efficiencies and - again – ready-to-go-snow in these medium range temperatures as well.
- To give your customers the best snow surfaces you can make – and make your grooming crew happy too. DRIFT's impact on the flow and freezing of snowmaking water results in a consistent and silky snow product that skiers regularly comment on. No stickiness, no clumping, no sticking to groomer blades either.

How does DRIFT work?

When DRIFT is dispersed in snowmaking water at 3-5 parts per million (3 - 5 gals/ltrs of DRIFT per 1 million gals/ltrs of water), it changes the flow dynamics by lowering the water's tensions, causing a "super-spreading" of the water. This has two significant effects on snow product quality and snowmaking efficiency.



Effect of DRIFT on Water. Drop on right contains DRIFT, drop on left does not.

First, the lowering of the natural cohesive tendencies of water allows the same volume of water to form a "thinner" mass with a much greater surface area. The thinner mass of water will freeze more rapidly and thoroughly. (Imagine a bucket of water and the same amount of water spread out in a pan. Which will freeze first?) The result is a ready-to-go-snow product that can be consistently produced and worked to the quality desired.

Second, the "thinning" effect that DRIFT has on water allows a higher ratio of water:air to be used at a given temperature because the droplets – while the same size/volume as droplets made without DRIFT – will freeze faster and float more (like a Frisbee!) before falling to the ground. This can translate into increased productivity (more water in a given time period) and reduced energy costs.

For more information on DRIFT snowmaking additive or to purchase product, please contact:

Aquatrols • 1-800-257-7797 • www.aquatrols.com

U.S. Patent No. 6,464,148. Patents pending worldwide.

When to Use DRIFT

When you are using fan guns, traditional air:water systems, or low energy guns. From marginal wet bulb temperatures down to the point where you are maxed out on your water:air. Benefits at temperatures below that vary by location.

How to use DRIFT

For high flow rate systems (> 1000 gpm) DRIFT can be injected directly into the system at a rate of 3 gals/ltrs per million gals/ltrs water. For lower flow rate systems – DRIFT is mixed with water in a stock tank (available from Aquatrols – or use your own) and then metered into the water to achieve the same 3 parts per million level. Refer to the label and/or injection chart for more detail.

Where has DRIFT been used?

DRIFT has been tested and used at mountains large and small across the US and Canada. It has also been tested in Korea. Comments from users have been consistent in regard to a better quality, ready-to-go-snow product and DRIFT's greater ease of use and handling (compared to using no additive, or using other brand name additives). For references please ask your DRIFT distributor or contact Aquatrols.