

Our ninth week in the VARA series seeks to increase your knowledge about the mysterious “black wax.”

Black waxes, known as Graphite, Graphite / Molybdenum, or Moly waxes (depending on what is in them) are a very useful tool to have in your toolbox.

As a general rule, “black” waxes are used to:

1. reduce friction
2. reduce static
3. increase dirt repellency

Most of us are familiar with walking across a carpet in just our socks, and touching something, creating a “shock.” This occurs mostly in the winter, when the inside air humidity is low, and the friction of dragging your feet across the carpet creates static. The same process occurs when you ski over cold, dry, snow in low to middle air humidity. The ski creates a strong static charge, which tries to hold the ski to the snow. The faster you are traveling, the more static is created. Speed skiers tend to use a great deal of graphite waxes, but they are also important

in tech events, too. The addition of graphite in the wax mixture in this situation helps to greatly reduce the amount of static which is created.

If the snow squeaks when you walk on it, you definitely need graphite in your wax.

The presence of a great deal of friction from the snow is also another use of graphite/moly waxes. Snow types that are extremely abrasive, such as very cold dry snow & very warm, dirty, re-frozen corn snow are very abrasive to the ski’s base and your wax. The use of the black waxes here is required to keep your base from wearing away to quickly!

Very dirty snow, such as that found in the late spring, also benefits from the use of “black” wax. The graphite, graphite / moly, or moly wax helps to repel the dirt, especially when combined with fluorocarbons. Usually, this dirty snow has been melted and re-frozen enough to make large, abrasive, round corn snow.

“Black waxes” should never be used when

there is fresh falling snow, or anytime the air humidity goes over 50%, or anytime the snow temperature is between -8C and 0C. In each of these conditions, there is enough water present in or on the snow surface to prevent the buildup of static, and to reduce friction.

Application of the wax varies greatly depending on the conditions. Sometimes, you will wax a straight graphite/moly wax (e.g. 20% air humidity, snow temp. -10 to -15C, fine dry old snow). But most times, you will combine the graphite / moly wax with another wax that matches the snow temperature and humidity range of the day. Do this by rubbing on the graphite before hot waxing with the day’s wax, or combining both waxes in a hot melt fashion. In this respect, you are the mixologist controlling just how much graphite / moly you apply based on conditions.

One last note – like fluoros, it is critical that you perform a hot scrape cleaning after using graphite / moly waxes,

as they can tend to clog
the pores of your skis.

Good luck!

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