

Recommended cleaning of used equipment from fluorinated substances

This document describes the proposed steps to “clean” used equipment from fluorinated substances and reduce contamination down to a level where no competitive advantage is present.

Cleaning of skis and snowboards

1. Clean the running base with a non-fluorinated base cleaner by applying the liquid with a cloth. Then rub the base surface with a fluor-free cleaning brush (stiff nylon). Let dry for 15 min, continue to brush the ski / board with a clean steel or bronze brush.
2. Perform “Hot Fluor-free wax cleaning” >10 times (iron hot wax – scrape while warm – brush) on each ski and board. Use waxes of different melt temperatures (warm – medium- cold). (Clean scrape and brush after every application)

Grinding the bases of skis/boards is an option that will also remove contamination fluorinated compounds from surface layers. Grinding is recommended for base material made with fluorinated additives since research shows that these additives migrate to the surface. After grinding step 1 and 2 should be repeated.

Equipment cleaning

- Iron
 - Scrape off excessive wax. Warm the iron and clean liquid wax residuals with a cloth. Melt non-fluorinated wax and clean with a cloth.
- Scrapers
 - Scrape off wax residuals. Clean with base cleaner, wash with water and soap, rinse thoroughly.
- Brushes
 - Vacuum clean the wax dust from the brush. Use the brush extensively while cleaning skis with hot wax and vacuum clean between every application. Dip the bristles in a base cleaner and brush over an edge to further clean the brush. Let dry and vacuum clean. As a final cleaning step, one may consider washing the brushes in a dish washer in a high temperature programme.

Warning: As brushes may be the most difficult equipment to clean thoroughly one should consider replacing used brushes with new ones.

- Roto fleece
 - Based on experience we recommend replacing roto fleece and similar equipment as they have shown to be almost impossible to clean thoroughly.
- Apron
 - Wash in washing machine with high temperature cycle several times.
- Files and file guides
 - Brush the equipment with a soft file brush. Vacuum clean. Dip into a base cleaner, wipe off and vacuum clean.

- Ski Bags
 - Vacuum any dust, wipe clean with cloth and base cleaner, wash with water and soap, rinse thoroughly.
- To secure a healthy working environment the wax room should be thoroughly cleaned. It is important to remove as much dust particles as possible. A safe and healthy working environment is the responsibility of the user.

The objective of these cleaning recommendations is to point towards both the cleaning as well as dilution effect the above waxing steps describes.

As of 14th August 2020