

COOLANT SUGGESTIONS-

Tuesday, January 30, 2018 12:55 PM

We recommend using a coolant.

- 1- To have the blade last longer
- 2- To have a smooth surface after cutting (some aluminum profiles do not respond well to saw blades, they are soft and do have a gummy looking surfaces after cutting, but cooling liquid seems to fix that).

You need to use water soluble oil based liquids, which are usually concentrates, so you need to mix them with water before using. The mixing amount changes from liquid to liquid, but it is usually 1 to 5, i.e. 1 gallon of concentrate + 5 gallons of water. In some coolants this ratio seems to be high and in some, less.

There are many brands/providers of the cooling liquids in the market. Attached please see a list of coolants that we saw at different customer locations.

What coolant you need to choose depends on the features of your aluminum profile.

- If your aluminum profile is coated with a paint or has an anodized coating, then you need to look for fluids with special formulation to prevent staining. I do not have a specific recommendation for this, but I noticed that one customer was using the following fluid for their painted aluminum, and they said it was more expensive than the others but it did not stain:
Accu-Lube LB-6800
- If you are cutting unpainted/bare profiles, then you can use pretty much any cooling liquid.
- Some liquids seem to help if you are planning to weld the aluminum profiles afterwards.


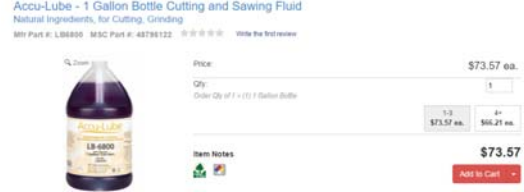
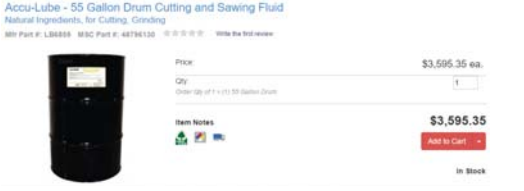




One customer was using UNIST coolant, a vegetable oil based liquid. I am not sure about its staining situation, though. Since it is vegetable oil based, maybe it is okay on anodized aluminum. I would say, give them a call to see if they are okay to use with the aluminum profile that you have.

However, there is one more liquid that is used for coolant: **WD-40**. This liquid gives a real shiny look when cutting.

Some customers said to me they are using just vegetable oil.

You can also contact grainger.com and describe what you need, they can recommend the right cooling fluid from the list as well.

Please contact your local supplier for further recommendations.

Coolant	Specific features noted.	Commercial suppliers
 <p>Accu-lube LB-6800 Medium duty machining fluid</p>	<p>BIODEGRADABLE One user reported that this mixture is good because it does not stain their painted aluminum profiles.</p>	<p>general product list. mscdirect.com--</p> <p>Accu-Lube - 1 Gallon Bottle Cutting and Sawing Fluid Natural Ingredients, for Cutting, Grinding Mfr Part #: LB6800 MSC Part #: 48798122</p>  <p>AccuLube-6800, gallon size \$73.57</p> <p>Accu-Lube - 55 Gallon Drum Cutting and Sawing Fluid Natural Ingredients, for Cutting, Grinding Mfr Part #: LB6800 MSC Part #: 48798130</p>  <p>Accu-lube-6800 in drum, \$3600</p>
  <p>Mobilcut-100</p>	<p>Some synthetic mixture. Happened to see at a location.</p>	<p>mscdirect.com-- general product list.</p> <p>Mobil - 1 Gallon Bottle Cutting Fluid - Water Soluble Brand: Mobil Mfr Part #: 121095 In Stock</p>  <p>mobilcut-100-gallonsize \$40.49/gallon,</p> <p>Mobil - 5 Gallon Pail Cutting Fluid Water Soluble Mfr Part #: 121094 MSC Part #: 42963918</p>  <p>Mobil-100, 5 gallon pail \$200.33/pail</p>



Baileigh coolant

One user has this cooling for their aluminum. They cut bare aluminum.

BIODEGRADABLE MIXING RATIO: 20 to 1

Baileigh Coolant



Baileigh Industrial B-cool Bio-degradable Baileigh Industrial Saw Coolant, Mix 20 To 1
Part# BA-B-COOL
(No reviews)

Call For Lead Times
International Shipping Available - Ship to anywhere in the world

\$42.00 Qty: 1 **ADD TO CART**
Buying in Bulk? Email Us, Please

[View at Baileigh Industrial](#) [View Accessories](#)



FMT sharpcool Premium Water Soluble

Some synthetic mixture. Happened to see at a location.

FMT SharpCool

\$233/ pail

5 Gallon SharpCool Premium Water Soluble Metalworking Fluid

FMT FASTENAL

Wholesale: \$232.32 / each
Quantity: 1 **Add to Cart**

Availability:
Shipping: Leaves Indianapolis warehouse within 1 business day
[View Shipping Locations](#)



Vegetable oil based coolant. One user had this coolant for his machine.

Unist.com coolube-2210AL

Coolube® 2210AL Aluminum metal cutting lubricant



Aluminum Advantage

Unist has expanded its line of MQL lubricants with a new oil specifically formulated for use with aluminum. Like all of Unist's fluids, Coolube® 2210AL aluminum cutting fluid is derived from natural vegetable oils, is machinist and environmentally friendly, and there are no VOC's.

Unist Coolube® 2210AL provides specific benefits when machining aluminum. Testing shows this aluminum bandsaw lubrication oil provides exceptional lubricity and stability under load, which helps improve tool life. Unist Coolube® 2210AL is nearly odorless and does not cause skin, eye, or throat irritation.

[download brochure](#)

Aluminum Cutting Fluid Benefits

- Improves performance and increases life of cutting tools, taps, and saw blades.
- Increased chip value
- Increased production speed
- No fluid oxidation (stickiness)

- Less housekeeping
- Specially formulated for use with aluminum
- Eliminates coolant treatment & disposal