

HOW TO

Highland IPA

Allgrain, 20 liter

This IPA is a slightly adapted version of PUNK IPA from Brewdog. All credit goes to them. PUNK IPA is a modern classic. Not too strong, very hoppy, but not too bitter.

Expected result:

OG: **1.053** FG: **1.010-12**
40 IBU ABV: **5,5%**
16 EBC Efficiency: **75%**

Ingredients:

Malts:

4.4 kg Weyermann Pale Ale Malt], 6.5 EBC
0.25 kg Weyermann Caramunich I, 100,5 EBC
Total: 4,65 kg

Hops:

Bag 1: 12,5 g Ahtanum 5,5% & 7g Chinook 13%, boil for 60 minutes.

Bag 2: 12,5 g Ahtanum 5,5% & 8g Chinook 13%, boil for 30 minutes.

Bag 3: 12,5 g Ahtanum 5,5% & 27,5g Chinook 13% & 12,5g Nelson Sauvignon 12,5% & 12,5g Simcoe 12,7%. boil for 1 minute.

Bag DRY: 37,5 g Ahtanum 5,5% & 47,5g Chinook 13% & 20g Nelson Sauvignon 12,5% & 37,5g Simcoe 12,7% & 10g Amarillo 8,6% & 37,5g Simcoe 12,7%. ADD THE LAST WEEK OF FERMENTING.

Total: 295g

Yeast:

Sachet: 1 * 11g -Safale US-05

Water profile:

Light and Hoppy

Water: We encourage you to brew on cheap bottled water, or RO water from your own system.

We always add salts and minerals in the pack, to fit clean RO water. Mix in mashwater.

In one of the bags of hops, we always add yeast nutrition and wort clear.

Mash:

You can do your mash in different ways. You know your system.

The most simple one is a one step fusion mash:

66°C for 90 min, increase to 78°C with 1°C per minute, keep at temperature for 10 minutes.

How much water you need, will depend on your system, see below.

Keep your mash water before stirring in at about 2-3 degrees warmer than your mash temp.

Mash water calculation

How much water you need for the mash will depend on your setup. A safe start will be 14 liters.

Sparge water calculation:

The target is that you have 25 liter before boiling.

For a start, sparge with ca. 15 liters of water at 79°C. Make notes, and adjust next time.

Boiling:

Boil for 60 minutes.

Add hops as listed under 'Boiling' on the next page.

Fermenting:

Add the yeast at the right temperature. The yeast makes the beer!

14 days at 18-21°C, or until it has stopped fermenting for 2 days.

Bottling:

To carbonate your beer, you need to add sugar before bottling.

Add 6 gram of sugar to each liter of beer.

Kegging:

This beer should have CO2 VOL of 2.5.

Maturing for bottles:

First two weeks at room temp (below 25).

Then cold (below 15) for two to three weeks.

Then store in the fridge, until you drink them.

HOW TO

On the Brewday:

Date:	Batch #:
-------	----------

Mash

66°C for 90 min, increase to 78°C by 1° per minute, keep 78° for 10 min.

Mash water in liters	Sparge water in liters	Actual mash temperature

- Mash water at correct temperature
- Malt added and stirred in
- Sparge water measured, and heated to 78
- Mashing done
- Sparging done

Boil

Boil for 60 minutes, add hops as listed below.

Boil started at:	Liters heated:
------------------	----------------

- Bag 1:** Add at beginning of boil, and boil for 60 minutes.
- Bag 2:** Add after 30 minutes of boil, and boil for 30 minutes.
- Bag 3:** Add after 59 minutes of boil, and boil for 1 minute.
- Wort chiller disinfected

After the boil

- Measured OG
- Wort chilled to 19 degrees

OG:	Efficiency:
-----	-------------

- Yeast added (disinfect your hands and the bag and sprinkle it in the beer)
- Cleaning done

Fermentation temperature:	Amount (L) in fermenter:
---------------------------	--------------------------

After 7 days:

- Transfer the beer to a clean and sanitized fermentor.
- Add dry hops from **Bag DRY**

After 11 days:

- Transfer to a clean and sanitized fermentor, to remove the dry hops

After 14 days or longer if it is still fermenting:

- FG Measured
- Beer bottled or kegged

When bottling:

Add sugar to a clean and sanitized fermentor - 6 grams per liter beer. Mix the sugar in 100ml of boiling water, then put it into the fermenter.

Transfer the beer to the fermentor. Then bottle.

FG:	ABV:	Packing date:
-----	------	---------------

Notes:
