

# Wolverine

Double IPA (22 A)

**Type:** All Grain  
**Batch Size:** 23.00 l  
**Boil Size:** 28.00 l  
**Boil Time:** 60 min  
**End of Boil Vol:** 25.50 l  
**Final Bottling Vol:** 21.00 l  
**Fermentation:** Ale, Single Stage

**Date:** 01 Nov 2017  
**Brewer:** Weezledog  
**Asst Brewer:**  
**Equipment:** Grainfather  
**Efficiency:** 73.00 %  
**Est Mash Efficiency:** 80.9 %  
**Taste Rating:** 30.0



## Taste Notes:

## Prepare for Brewing

- Clean and Prepare Brewing Equipment
- Total Water Needed: 42.16 l
- Mash Water Acid:
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## Water Prep

Amt	Name	Type	#	%/IBU
4.00 g	Gypsum (Calcium Sulfate) (Mash 60.0 mins)	Water Agent	1	-
2.00 g	Epsom Salt (MgSO4) (Mash 60.0 mins)	Water Agent	2	-
1.00 g	Calcium Chloride (Mash 60.0 mins)	Water Agent	3	-

## Mash or Steep Grains

## Mash Ingredients

Amt	Name	Type	#	%/IBU
7.00 kg	Gladfield Ale Malt (3.0 SRM)	Grain	4	91.5 %
0.15 kg	Gladfield Sour Grapes Malt (2.0 SRM)	Grain	5	2.0 %

## Mash Steps

Name	Description	Step Temperature	Step Time
Mash In	Add 25.65 l of water at 71.4 C	65.0 C	90 min

- Sparge Water Acid:
- Fly sparge with 16.51 l water at 75.6 C
- Add water to achieve boil volume of 28.00 l
- Estimated pre-boil gravity is 1.064 SG

## Boil Ingredients

Amt	Name	Type	#	%/IBU
0.050 kg	Southern Cross [13.00 %] - Boil 60.0 min	Hop	6	53.1 IBUs
1.00 tsp	Irish Moss (Boil 10.0 mins)	Fining	7	-
0.50 kg	Corn Sugar (Dextrose) [Boil for 10 min](0.0 SRM)	Sugar	8	6.5 %

## Steeped Hops

Amt	Name	Type	#	%/IBU
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0.100 kg	Cascade [5.50 %] - Steep/Whirlpool 30.0 min	Hop	9	10.4 IBUs
0.050 kg	Citra [12.00 %] - Steep/Whirlpool 30.0 min	Hop	10	11.3 IBUs
0.050 kg	Nelson Sauvin [12.00 %] - Steep/Whirlpool 30.0...	Hop	11	11.3 IBUs
0.050 kg	Simcoe [13.00 %] - Steep/Whirlpool 30.0 min	Hop	12	12.3 IBUs
0.025 kg	Southern Cross [13.00 %] - Steep/Whirlpool 30....	Hop	13	6.1 IBUs

- Estimated Post Boil Vol: 25.50 l and Est Post Boil Gravity: 1.078 SG

### Cool and Transfer Wort

- Cool wort to fermentation temperature  
 Transfer wort to fermenter  
 Add water if needed to achieve final volume of 23.00 l

### Pitch Yeast and Measure Gravity and Volume

### Fermentation Ingredients

Amt	Name	Type	#	%/IBU
1.0 pkg	Safale American (DCL/Fermentis #US-05) [50.2...	Yeast	14	-

- Measure Actual Original Gravity \_\_\_\_\_ (Target: 1.078 SG)  
 Measure Actual Batch Volume \_\_\_\_\_ (Target: 23.00 l)  
 Add water if needed to achieve final volume of 23.00 l

### Fermentation

- 01 Nov 2017 - Primary Fermentation (14.00 days at 19.4 C ending at 19.4 C)

### Dry Hop and Bottle/Keg

### Dry Hop/Bottling Ingredients

Amt	Name	Type	#	%/IBU
0.500 kg	Nelson Sauvin [12.00 %] - Dry Hop 7.0 Days	Hop	15	0.0 IBUs
0.500 kg	Southern Cross [13.00 %] - Dry Hop 7.0 Days	Hop	16	0.0 IBUs
0.100 kg	Cascade [5.50 %] - Dry Hop 7.0 Days	Hop	17	0.0 IBUs
0.050 kg	Citra [12.00 %] - Dry Hop 7.0 Days	Hop	18	0.0 IBUs

- Measure Final Gravity: \_\_\_\_\_ (Estimate: 1.011 SG)  
 Date Bottled/Kegged: 15 Nov 2017 - Carbonation: Keg with 14.89 PSI  
 Age beer for 30.00 days at 18.3 C  
 15 Dec 2017 - Drink and enjoy!

### Notes