

ipa #89

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **73**
- SRM **4**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.7 liter(s)**
- Total mash volume **15.6 liter(s)**

Steps

- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **11.7 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **11.2 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------------|----------------|-------|-----|
| Grain | Weyermann - Bohemian Pilsner Malt | 3 kg (76.9%) | 81 % | 4 |
| Grain | Weyermann - Vienna Malt | 0.5 kg (12.8%) | 81 % | 8 |
| Grain | Pszeniczny | 0.4 kg (10.3%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|-------------------|--------|----------|------------|
| Boil | Simcoe | 20 g | 60 min | 11.3 % |
| Boil | Cascade | 25 g | 60 min | 7 % |
| Whirlpool | Simcoe | 25 g | 15 min | 13.2 % |
| Whirlpool | Waimea | 10 g | 10 min | 17 % |
| Dry Hop | Mosaic yakimachef | 25 g | 3 day(s) | 10 % |
| Dry Hop | Nelson Sauvign | 25 g | 3 day(s) | 11 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|-----------------------------------|-----|-------|--------|------------|
| WLP060 - American Ale Yeast Blend | Ale | Slant | 150 ml | White Labs |
|-----------------------------------|-----|-------|--------|------------|

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------|--------|---------|-------|
| Fining | whirflock | 1 g | Boil | 5 min |