

Alpaczi

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **47**
- SRM **6.6**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.9 liter(s)**
- Total mash volume **19.9 liter(s)**

Steps

- Temp **63 C**, Time **50 min**
- Temp **70 C**, Time **10 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **14.9 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **50 min** at **63C**
- Keep mash **10 min** at **70C**
- Keep mash **10 min** at **76C**
- Sparge using **16.5 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|--------|-----|
| Grain | Briess - 2 Row Brewers Malt | 4 kg (80.5%) | 80.5 % | 4 |
| Grain | Munich Malt | 0.28 kg (5.6%) | 80 % | 18 |
| Grain | Briess - Caramel Malt 90L | 0.2 kg (4%) | 75 % | 177 |
| Grain | Briess - Vienna Malt | 0.22 kg (4.4%) | 77.5 % | 7 |
| Grain | Castlemalting - Cara Clair | 0.27 kg (5.4%) | 78 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|------------|------------|--------|--------|------------|
| First Wort | Simcoe | 20 g | 60 min | 13.1 % |
| Boil | Simcoe | 5 g | 15 min | 13.1 % |
| Boil | Amarillo | 5 g | 15 min | 8 % |
| Boil | Centennial | 5 g | 15 min | 7.3 % |
| Boil | Cascade | 5 g | 15 min | 5 % |
| Boil | Amarillo | 5 g | 10 min | 8 % |
| Boil | Centennial | 5 g | 10 min | 7.3 % |

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|---------------------|------------|------|----------|--------|
| Boil | Cascade | 5 g | 10 min | 5 % |
| Boil | Simcoe | 5 g | 10 min | 13.1 % |
| Boil | Amarillo | 5 g | 5 min | 8 % |
| Boil | Centennial | 5 g | 5 min | 7.3 % |
| Boil | Cascade | 5 g | 5 min | 5 % |
| Boil | Simcoe | 5 g | 5 min | 13.1 % |
| Aroma (end of boil) | Northdown | 14 g | 0 min | 6.5 % |
| Dry Hop | Simcoe | 15 g | 3 day(s) | 13.1 % |
| Dry Hop | Cascade | 15 g | 3 day(s) | 5 % |
| Dry Hop | Centennial | 15 g | 3 day(s) | 7.3 % |
| Dry Hop | Amarillo | 15 g | 3 day(s) | 8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|----------------|--------|---------|--------|
| Water Agent | gypsum | 3 g | Mash | 70 min |
| Other | yeast nutrient | 10 g | Boil | 15 min |
| Fining | copper finings | 1 g | Boil | 15 min |
| Water Agent | lactic acid | 4 g | Mash | 60 min |