

AIPA ZM-2019

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **75**
- SRM **5.2**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **42 liter(s)**
- Trub loss **5 %**
- Size with trub loss **44.1 liter(s)**
- Boil time **90 min**
- Evaporation rate **8 %/h**
- Boil size **53.2 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **2.6 liter(s) / kg**
- Mash size **28.6 liter(s)**
- Total mash volume **39.6 liter(s)**

Steps

- Temp **66 C**, Time **80 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **28.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **80 min** at **66C**
- Keep mash **5 min** at **78C**
- Sparge using **35.6 liter(s)** of **76C** water or to achieve **53.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 9 kg (81.8%) | 80 % | 5 |
| Grain | Strzegom Pilzneński | 0.5 kg (4.5%) | 80 % | 4 |
| Grain | Pszeniczny | 0.75 kg (6.8%) | 85 % | 4 |
| Grain | Aroma CastleMalting | 0.25 kg (2.3%) | 78 % | 100 |
| Grain | Strzegom Pilzneński | 0.5 kg (4.5%) | 80 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|----------|------------|
| Boil | Bravo | 44 g | 60 min | 15.5 % |
| Boil | Cascade | 25 g | 15 min | 4.5 % |
| Boil | Citra | 30 g | 10 min | 12 % |
| Boil | Cascade | 25 g | 5 min | 6 % |
| Boil | Citra | 30 g | 3 min | 12 % |
| Boil | Citra | 50 g | 60 min | 12 % |
| Boil | Cascade | 10 g | 15 min | 6 % |
| Boil | Cascade | 15 g | 5 min | 6 % |
| Boil | Cascade | 10 g | 3 min | 6 % |
| Dry Hop | Citra | 20 g | 4 day(s) | 12 % |

| | | | | |
|---------|------------|------|----------|--------|
| Dry Hop | Cascade | 20 g | 4 day(s) | 6 % |
| Dry Hop | Citra | 40 g | 4 day(s) | 12 % |
| Dry Hop | Cascade | 40 g | 4 day(s) | 6 % |
| Dry Hop | Centennial | 50 g | 4 day(s) | 10.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 20 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|--------|
| Fining | Mech irlandzki | 3 g | Boil | 15 min |