

10 20 30 40

- Gravity **15.7 BLG**
- ABV ---
- IBU **48**
- SRM **11.4**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **81 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **24.3 liter(s)**

Steps

- Temp **65 C**, Time **75 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **18.9 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **75 min** at **65C**
- Keep mash **2 min** at **78C**
- Sparge using **11.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Pale Malt (2 Row) US | 5 kg (92.6%) | 79 % | 4 |
| Grain | Strzegom Karmel 150 | 0.4 kg (7.4%) | 75 % | 150 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|----------|------------|
| Boil | Citra | 10 g | 60 min | 13.5 % |
| Boil | Citra | 20 g | 20 min | 13.5 % |
| Boil | Citra | 30 g | 10 min | 13.5 % |
| Dry Hop | Citra | 40 g | 7 day(s) | 13.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| US-05 | Ale | Dry | 11 g | --- |