

## APA Z JACKIEM (y)

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- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **36**
- SRM **6.5**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **28.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

### Steps

- Temp **62 C**, Time **55 min**
- Temp **67 C**, Time **25 min**
- Temp **78 C**, Time **0 min**

### Mash step by step

- Heat up **21 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **55 min** at **62C**
- Keep mash **25 min** at **67C**
- Keep mash **0 min** at **78C**
- Sparge using **14.7 liter(s)** of **76C** water or to achieve **28.7 liter(s)** of wort

### Fermentables

| Type  | Name                  | Amount       | Yield | EBC |
|-------|-----------------------|--------------|-------|-----|
| Grain | Viking Pale Ale malt  | 5 kg (71.4%) | 80 %  | 5   |
| Grain | Viking Pilsner malt   | 1 kg (14.3%) | 82 %  | 4   |
| Grain | Karmelowy Jasny 30EBC | 1 kg (14.3%) | 75 %  | 30  |

### Hops

| Use for | Name    | Amount | Time     | Alpha acid |
|---------|---------|--------|----------|------------|
| Boil    | Cascade | 28 g   | 60 min   | 10 %       |
| Boil    | Mosaic  | 25 g   | 15 min   | 10 %       |
| Boil    | Simcoe  | 50 g   | 0 min    | 13.2 %     |
| Dry Hop | Cascade | 50 g   | 1 day(s) | 6 %        |
| Dry Hop | Cascade | 50 g   | 2 day(s) | 6 %        |
| Dry Hop | Simcoe  | 25 g   | 0 day(s) | 13.2 %     |