

AAA Mad Jack's

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **26**
- SRM **11.5**
- Style **American Amber Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **29.3 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.8 liter(s)**
- Total mash volume **33 liter(s)**

Steps

- Temp **68.5 C**, Time **90 min**
- Temp **75.6 C**, Time **20 min**

Mash step by step

- Heat up **24.8 liter(s)** of strike water to **76.6C**
- Add grains
- Keep mash **90 min** at **68.5C**
- Keep mash **20 min** at **75.6C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **29.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|-----------------|-------|-----|
| Grain | Viking Pale Ale malt | 5.77 kg (69.9%) | 80 % | 5 |
| Grain | Strzegom Monachijski typ I | 0.91 kg (11%) | 79 % | 16 |
| Grain | Biscuit Malt | 0.59 kg (7.1%) | 79 % | 45 |
| Grain | Karmelowy żytni Strzegom | 0.58 kg (7%) | 75 % | 150 |
| Grain | Briess - Carapils Malt | 0.41 kg (5%) | 74 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|------------|---------|--------|--------|------------|
| First Wort | Equinox | 18 g | 70 min | 13.5 % |
| Boil | Cascade | 35 g | 5 min | 5.9 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale | Slant | 180 ml | Safale |