

# Obelżywy atak

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **57**
- SRM **6.7**
- 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 **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **22.4 liter(s)**
- Total mash volume **28 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **22.4 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **9.6 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount        | Yield | EBC |
|-------|-----------------------------|---------------|-------|-----|
| Grain | Castle Pale Ale             | 5 kg (89.3%)  | 80 %  | 8   |
| Grain | Weyermann - Carared         | 0.2 kg (3.6%) | 75 %  | 45  |
| Grain | Weyermann - Melanoiden Malt | 0.2 kg (3.6%) | 81 %  | 53  |
| Grain | Weyermann - Carapils        | 0.2 kg (3.6%) | 78 %  | 4   |

## Hops

| Use for   | Name     | Amount | Time     | Alpha acid |
|-----------|----------|--------|----------|------------|
| Boil      | Chinook  | 20 g   | 45 min   | 11 %       |
| Boil      | Chinook  | 10 g   | 15 min   | 11 %       |
| Boil      | Amarillo | 10 g   | 15 min   | 7.7 %      |
| Whirlpool | Amarillo | 20 g   | 30 min   | 7.7 %      |
| Whirlpool | denali   | 20 g   | 30 min   | 14.2 %     |
| Whirlpool | cirta    | 20 g   | 30 min   | 12.9 %     |
| Dry Hop   | Citra    | 40 g   | 3 day(s) | 13.3 %     |
| Dry Hop   | Denali   | 40 g   | 3 day(s) | 14.2 %     |

## Yeasts

| Name             | Type | Form | Amount | Laboratory |
|------------------|------|------|--------|------------|
| Framgarden Kveik | Ale  | Dry  | 10 g   | ---        |

## Extras

| Type   | Name     | Amount | Use for | Time  |
|--------|----------|--------|---------|-------|
| Fining | whirfloc | 0.5 g  | Boil    | 5 min |

## Notes

- Chmienie na whirpool 78C przez 30 min  
Whirfloc 0,5 tabletki  
*Aug 16, 2020, 3:17 AM*