

GREEN KARUZEL 2022

- Gravity **14.3 BLG**
- ABV ---
- IBU **29**
- SRM **4.9**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **1600 liter(s)**
- Trub loss **5 %**
- Size with trub loss **1680 liter(s)**
- Boil time **60 min**
- Evaporation rate **2 %/h**
- Boil size **1876.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **1500 liter(s)**
- Total mash volume **2000 liter(s)**

Steps

- Temp **70 C**, Time **80 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **1500 liter(s)** of strike water to **78.3C**
- Add grains
- Keep mash **80 min** at **70C**
- Keep mash **10 min** at **76C**
- Sparge using **876.8 liter(s)** of **76C** water or to achieve **1876.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|--------------|-------|-----|
| Grain | Viking Pale Ale malt | 200 kg (40%) | 80 % | 5 |
| Grain | Słód owsiany Fawcett | 200 kg (40%) | 61 % | 5 |
| Grain | Weyermann - Carapils | 50 kg (10%) | 78 % | 4 |
| Grain | Żytni | 50 kg (10%) | 85 % | 8 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------|--------|----------|------------|
| Aroma (end of boil) | Citra | 2000 g | 40 min | 13 % |
| Dry Hop | Citra | 5000 g | 5 day(s) | 12 % |
| Dry Hop | Mosaic | 5000 g | 5 day(s) | 10 % |
| Dry Hop | Galaxy | 5000 g | 5 day(s) | 15 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------|------|-------|----------|------------|
| London Ale III | Ale | Slant | 10000 ml | White Labs |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|----------------|--------|---------|--------|
| Water Agent | Chlorek wapnia | 500 g | Mash | 60 min |