

hazy apa - Planet Caravan

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **32**
- SRM **3.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **60 liter(s)**
- Trub loss **3 %**
- Size with trub loss **63.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **6 %/h**
- Boil size **71.9 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **39 liter(s)**
- Total mash volume **52 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **39 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **0 min** at **78C**
- Sparge using **45.9 liter(s)** of **76C** water or to achieve **71.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|--------------|-------|-----|
| Grain | Pilsner (2 Row) Ger | 8 kg (61.5%) | 81 % | 4 |
| Grain | Pszeniczny | 2 kg (15.4%) | 85 % | 4 |
| Grain | Słód owsiany Fawcett | 1 kg (7.7%) | 61 % | 5 |
| Grain | Płatki pszeniczne | 1 kg (7.7%) | 60 % | 3 |
| Grain | Płatki owsiane | 1 kg (7.7%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|-------------------|--------|--------|------------|
| Whirlpool | Mandarina Bavaria | 100 g | 30 min | 10 % |
| Whirlpool | lunga | 100 g | 30 min | 11 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------------|------|------|--------|------------|
| Lallemand - LalBrew Verdant IPA | Ale | Dry | 11.5 g | Lallemand |