

#31 AS

- Gravity **12.6 BLG**
- ABV ---
- IBU **11**
- SRM **28.5**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **22.4 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|--------|-----|
| Grain | Strzegom Pale Ale | 5 kg (89.3%) | 79 % | 6 |
| Grain | Strzegom Karmel 600 | 0.2 kg (3.6%) | 68 % | 601 |
| Grain | Kawowy CastleMalting | 0.2 kg (3.6%) | 75.5 % | 500 |
| Grain | Black of Black | 0.2 kg (3.6%) | 7.2 % | 500 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------|--------|----------|------------|
| Aroma (end of boil) | Amarillo | 15 g | 10 min | 9.5 % |
| Aroma (end of boil) | Sorachi Ace | 15 g | 10 min | 10 % |
| Whirlpool | Amarillo | 15 g | 0 min | 9.5 % |
| Whirlpool | Sorachi Ace | 15 g | 0 min | 10 % |
| Dry Hop | Amarillo | 20 g | 5 day(s) | 9.5 % |
| Dry Hop | Sorachi Ace | 20 g | 5 day(s) | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale | Slant | 500 ml | Safale |