

Safety Slide: Diazomethane

- Neat: explosive yellow gas
- Used as solution (Et₂O)
- Cannot buy, must make and distill
- Toxic if inhaled, skin contact, or eye contact
- Symptoms: chest discomfort, difficulty breathing, headache, fatigue, possible death
 - can be delayed
- Can explode when contacting sharp edges:
 - ground glass
 - regular pipet
 - scratches in glassware
- Explodes when heated > 100 °C
- Light, alkali metals, calcium sulfate (& some drying agents) can initiate explosion
- Standard PPE: lab coat, safety goggles, gloves, long pants, closed-toed shoes
- Inspect glassware carefully before use
 - Buy specialized glassware with flame-polished joints
- Use a blast shield
- Storage not recommended. Refrigerate. Can use KOH as drying agent.
- To quench: add acetic acid slowly/dropwise @ 0 °C until solution loses yellow color
- Can be substituted with TMSCHN₂

