

## Deep Eutectic Solvents - Safety Information

Email from Rejwanur Rahman on April 20th 2024

The DES solution that I have sent are,

1. Chcl:EG (1:2)
2. Chcl:EG (1:1)
3. Chcl:Urea (1:2)
4. EG:Citric Acid (2.5:1)

Handling DES,.

- Consider using fume hood while heating DES
- Keep flammable materials away from the area.
- Avoid skin contact and direct inhalation of vapors. If a spill occurs, wash the affected area with water.
- DES may absorb moisture from air as it's hygroscopic, use desiccator to store for long term use. Better to place desiccant like silica gel in the bottom to make sure to absorb any residual moisture in the container for making sure that it isn't degrading.
- Use common choices of nitrile or butyl rubber gloves. DES can irritate skin.
- Wash hands thoroughly with soap and water after handling DES, even if you wore gloves.
- Do not pour DES down the drain or discard it with regular trash.
- Heat up the DES at 80 degree celcius for 6 hours before using it for characterization.
- If any DES has crystallization or solidication after keeping it for sometimes, heat up around 130 to140 degrees for 12 hours. Then use it for characterization.