

**Carcinogens Cliffs Notes**

Classifications of Carcinogens:

International Agency for Research on Cancer (IARC)

* Group 1: Definitely Carcinogenic
* Group 2A: Probably Carcinogenic
* Group 2B: Possibly Carcinogenic
* Group 3: Not Classifiable (Usually lack of data)
* Group 4: Not Carcinogenic

Globally Harmonized System:

* Category 1A: Known carcinogen based on human evidence
* Category 1B: Known carcinogen based on animal evidence
* Category 2: Suspected human carcinogen

Category 1 is labeled as H350 and category 2 is labeled as H351 in the GHS system.

A long list of chemicals known to cause cancer can be found at: <http://www.oehha.ca.gov/prop65/prop65_list/files/filesp65single110112.pdf>

Band Specific Practices: All carcinogens must be used in **designated area.** Since DCM is a carcinogen that falls into this band, just **have the whole lab be the designated area**

Use of carcinogenic compounds:

1. Review SDS/MSDS (easily found on chemical supplier website)
2. Always use them in the hood
3. Use smallest quantity possible or a different process if available (i.e. swern/copper oxidation instead of PCC)
4. Talk to PI if large scale or you have any questions about handling it

PPE:

* Nitrile gloves (double or thicker gloves if particularly nasty)
* Lab coat, long pants, closed toe shoes
* Safety glasses or splash goggles