# Chemical Hygiene Plan Appendix H: Select Carcinogens

A carcinogen is any substance or agent that is capable of causing cancer. Cancer is the abnormal or uncontrolled growth of new cells in any part of the body in humans or animals. Carcinogens are chronic toxins with long latency period that can cause damage after repeated of long duration exposures and often do not have immediate apparent harmful effects. Always refer to the SDS sheet to see if a material is cancer causing or not.

The OSHA Lab Standard defines a “Select Carcinogen” as any substance which meets one of the following criteria:

1. It is regulated by OSHA as a carcinogen; or
2. It is listed under the category, “known to be carcinogens,” in the Animal Report on Carcinogens published by the National Toxicity Program (NTP) *latest edition*; or
3. It is listed under Group 1 “carcinogenic to humans” buy the International Agency for Research on Cancer Monographs (IARC) *latest edition*; or
4. It is listed either Group 2A or 2B by the International Agency for Research on Cancer (IARC) or under the category “reasonably anticipated to be carcinogenic by the National Toxicity Program (NTP), and causes statistically significant tumor incidence in experimental animals in accordance with any of the following criteria:
   1. After inhalation exposure of 6-7 hours per day 5 days per week, for a significant portion of a lifetime to dosage of less than 10 mg/m3;
   2. After repeated skin application of less than 300 mg/kg of body weight per week; or
   3. After oral dosage of less than 50 mg/kg of body weight per day.

With regards to mixtures, OSHA requires that a mixture, “shall be assumed to present a carcinogenic hazard if it contains a component in concentrations of 0.1% or greater, which is considered to be carcinogenic”.

More information on carcinogens can be found on the following links:

OSHA Regulated Carcinogens: <https://www.osha.gov/SLTC/carcinogens/standards.html>

Annual Report on Carcinogens: <http://ntp.niehs.nih.gov/pubhealth/roc/roc13/index.html>

Group 2A or 2B by IARC: <http://monographs.iarc.fr/ENG/Classification/>