

CLASSIFICATIONS AND HANDLING OF DANGEROUS SUBSTANCES Dangerous materials are having specific physical or chemical properties that could lead to potential hazard to human safety and health if not controlled properly. Hydrogen Peroxide and Lead Nitrate are examples of this category. Many of them are reactive and are liable to heating up. Three subcategories of flammable solids are Class 4.1 – Flammable solids that burn and decompose explosively and emit toxic gases, Class 4.2 – Spontaneously Combustible that react quickly with oxygen, Class 4.3 – dangerous when wet as they react with water producing flammable gases that could be ignited by the heat. Most of them are dangerous as they affect human metabolism or react with oxygen and would result in the release of toxins and poisonous substances. Class 3: Flammable Liquids – Flammable liquids are combustible at low temperatures and encounter huge risk of exposure to ignitions. Class 4: Flammable Solids – Flammable solids are dangerous as they are easily combustible while transporting. Calcium carbide on contacting with water produces acetylene gas which is easily combustible is an example of this category.