

20 Can you explain about the risk and harm of chemical substances?

Risks of chemical substances include explosion and ignition. Explosions by chemical substances are called chemical explosions. The explosions can be divided into 3 types: an aggregate explosion (explosion by solid), a gas phase explosion (a gas explosion), and an explosion by dust/mist. Minimum ignition energy of a gas phase explosion is 0.02~2 mJ, so it is known that the static electricity of a human body (2.5mJ) can enough cause explosion.

Chemical substances have harmful effects on human body and environmental pollutions. Suicides by hydrogen sulfide poisoning (over 700ppm) and suicides by carbon monoxide poisoning (over 500ppm) used briquette are increasing recently. There are some cases such as injury cases by putting poison into someone's drink purposely and suicide cases by drinking it one's self. Furthermore, chemical sensitivity, an allergic reaction provoked by small amount of chemical substances, becomes a social problem.

It is important to get information regarding the risk and harm of chemical substances through Internet sites, etc. when handling chemical substances in practice. Also, many chemical substances are handled in our life. Read the instruction carefully and learn the risk and harm of chemical substances.

Many chemical substances are handled for education, researches, and medical in the university. Keep out the room with this sign below, means handling chemical substances, with no reason.



It is important to observe laws and rules regarding chemical substances and learn those knowledge and techniques from an expert when handling chemical substances.

Many chemical substances have potential risks and harms, such as explosion, fire, health problems, and environmental pollution. When handling chemical substances, use them after understanding of the risks and harms.