## Negative effects of chemicals in commercial powdered-pigment for paint

Science, Chemistry



Art materials such as paints are being used by numerous people of all ages, whether a person is a child, middle-aged or old. It is known that certain metallic compounds or chemical that contains metals can be found in these can cause problems particularly in health, moreover if these are being used more frequently, it is mostly risky for children. Having said that, 134 cases of accidental poisoning in children have been reported, children belonging to the age group of 1-3 years are the main victims. Children aged 1-3, an age at which the child is curious and liked to put things into his or her mouth.

Painting or art materials can be very harmful most especially to children for it contains chemicals that is not healthy and worst hazardous to human health. Most art materials uses elements that has toxic or it itself is toxic, hence, it is a very big risk to expose the children to these art materials that we traditionally use. There is also a survey, and in the survey conducted among (14-15 years old) that are engaged in art materials. 80% children and individuals who uses materials that is oblivious of the risks and labels is dominant – that counts around 80% – than the individual who is fully attentive about the materials that they are using. 35% are the individuals who's aware of the risk that they might take upon using the materials but do not bother knowing the label and 30% were the ones who read labels. Unfortunately, the individuals and children who obtained enough knowledge about both risks and labels has the least percentage which rage on about 12. 5%.

One of the art materials is paint, to create a paint an individual may use pigment. Dry pigments or powdered pigments can actually be dangerous

and threatening because it can be inhaled in an instant. Poisoning may occur through such accidents as eating, drinking and pointing of any materials that had pigment on it. In fact, one of the toxics that can be found in an inorganic pigment is called white lead or flake white, that might cause and lead to severe damage such as anemia, brain damage to children, kidney damage and damage in reproductive system. Furthermore, the toxic known as lead is a metal and it can cause health and environmental problems and issues. It is greatly hazardous for children that it might lead to severe illness such as damage in brain. In addition to that, lead poisoning or plumbisim is the intoxication of our body system to compounds that usually containing lead. These could enter by means of breathing of the component or by ingesting it that comes with food or other factors that it will be contaminated with lead. Lead poisoning is the leading cause for hazards in different parts of the world. It will be more deadly and dangerous if continues exposure will occur. For more example, nickel can also be found in pigment used as paint. Nickel exposure through breathing, eating and drinking can cause higher chances of development of cancer, larynx cancer, and prostate cancer. It also causes respiratory failure, asthma, and heart disorder.

Inorganic pigments that are also composed of cadmium, cobalt, chromium or manganese can generate extreme poisonous and dangerous wastes in unregulated manufacture. Also, cadmium like lead, is toxic element when you directly or inhaled this element it can cause disorder or damage on your body, this element is use as one of the ingredients of art paint that possibly have a high concentration of cadmium. Therefore, products that contain

chemicals would be harmful in any living things, it can cause problems to an individual's health and to our nature.

According to Phillips (2016), Paul Klee, a Swiss German artist was plagued with Sclerodema a range of disorders in which the skin and connective tissues tighten and harden. These kinds of illnesses are commonly link to heavy metals that were commonly found in paints most commonly the cadmium that is used to enhanced the brightness of the color.

For an instance, another composition of inorganic pigment is the cobalt. Cobalt is one of the main ingredients of watercolor. It has become hazardous to the environment for it cannot be refrain to enter the environment, for it is being absorbed and inflicted in soil and water sediments that may affect the production of plants and also cam affect the health of animals (Domingo, 1989). Exposure in cobalt can cause toxic level on your body. There is a high risk if it is expose in human, it can harm organs, but not only in human also in all living things.