Materials handling policy development

Material Handling Policy Development due: Identification of the Health Hazards Any individual working with industries that use sulphuric acid as their raw material or manufactures of the acid itself must understand the dangers linked it. Manufacturers are required to make health hazard information presented on the product tag and material safety data sheet (MSDS). Identification of these health hazards such as irritation of the skin informs the users of what to do and not to do in relation to chemical handling. It also helps in minimizing cases of employees exposing him/herself to these hazards unknowingly (Seufert, 2014).

Identification of the methods used to protect the employee

Sulphuric acid is a volatile chemical that can cause adverse effects to any individual exposed to it. Methods used to protect employees should be based on the proper safety measure. This is by the use of protective clothing as discussed below:

Eye/Face Protection: A protection mechanism would be to wear face shield and chemical safety goggles when contact is possible (Louie, 2008).

Skin Protection: Wear chemical protective clothing such as aprons, boots and gloves. Suitable materials to use in protecting employees may include butyl rubber (Louie, 2008).

Respiratory Protection: wear an approved air cleansing respirator with acid gas cartridge in grouping with N100, R100, or P100 filter or supplied air respirator (Louie, 2008).

Proper Handling methods and cautions

It is vital to wear suitable protective gloves, aprons and boots when handling sulphuric acid as it is a corrosive material. If sulphuric acid gets into contact with the skin immediately, the first step that should be done is that the

affected area should be thoroughly washed with plenty of water. It may also be essential to seek medical care (Greenberg & Cramer, 2011). Moreover, when handling this material, any employee should avoid generating vapors. All employes ought to immediately report leaks or failures of the safety equipment such as ventilation system. Also, all employees ought to avert accidental interaction with irreconcilable chemicals. Never add water to a corrosive sulphuric acid being an example. If product is moved to another vessel, ensure new vessel is appropriate for the product. Never reuse empty vessels, even if they appear right to use (Louie, 2008).

Spill or release procedures

In case a spill or leak of sulphuric acid occurs, one should follow instructions given by emergency service responders and local authorities. Keep products and the place out of reach of children (Louie, 2008).

Safe Storage of materials

Gallons of this chemical should be stored safely to reduce the risk they pose to and employees handling them. Store this corrosive chemical in an area that is: cool, dry, away from direct sunlight and away from ignition sources and heat, separate from irreconcilable materials. Regularly review for physical signs of crystallization or damage (Seufert, 2014).

Proper Marking of containers

All hazardous chemical containers like sulphuric acid are required to be branded with the chemical name, danger warnings and how to handle incidences such as spilling of the acid. The manufacturers label should be kept unbroken until the bottle, or the container has been emptied. When the chemical substance is transferred to a secondary container, it must be clearly branded with their contents and cautions. Additional labeling

necessities can be added in the Chemical Hygiene Plan (Seufert, 2014).

References

Greenberg, H. R., & Cramer, J. J. (2011). Risk assessment and risk management for the chemical

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