



eSafetyLine

What Can Green Chemistry Do?

Green chemistry is not just a way of manufacturing chemicals to decrease the hazards that go along with them but also a way to make the use of chemicals more efficient. Sometimes it takes place at the molecular level to reduce or eliminate the use and manufacturing of hazardous substances. This offers environmentally helpful alternatives to more hazardous chemicals and in turn helps prevent pollution.

These benefits can help every day at the jobsite. The risk of using a hazardous chemical or process can be seen as an equation: ***Risk = Hazard X Exposure***

Traditionally, when looking to keep employees safe from various hazards, the employer looks to reduce the exposure of the employee. This is true whether the hazard is noise, heat, height or chemicals in the atmosphere. Exposure is usually limited by the amount of time an employee can be in the presence of whatever the hazard may be or by the use of different types of PPE. Green chemistry looks at this equation in a different way, instead of limiting exposure to a dangerous chemical decrease the hazard of the chemical then the exposure time is much less important.

Whenever an employer is choosing PPE cost and the potential for failure must be considered. Green chemistry can address both these concerns; by decreasing the need for PPE the cost of equipment will be decreased. Also if PPE is not needed there would be no worry of it being used incorrectly or not at all. By removing the threat of hazards of chemicals in the workplace, green chemistry can help to keep employees safer as well as decrease cost to employers. It is true that some green alternatives are a bit more expensive than their traditional

counterparts; this needs to be balanced with the potential decrease in cost of necessary PPE, the potential decrease in employee accidents and days away as well as the possibility of passing along a better, safer planet to our children and grandchildren.

Discussion Questions

How can Green Chemistry help the average employer or employee?

How does Green Chemistry affect the Risk= Hazard X Exposure?

MEETING / TRAINING ATTENDANCE ROSTER

COMPANY: _____

_____ SAFETY MEETING

JOB/DEPT: _____

_____ SAFETY TRAINING

DATE: ___/___/_____

TIME: _____

TOPICS ADDRESSED: _____

EMPLOYEE'S SIGNATURES

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

EMPLOYEE SUGGESTIONS AND RECOMMENDATIONS: _____

ACTION TAKEN: _____

Supervisor's Signature

_____/_____/_____
Date

Safety Coordinator's Signature

_____/_____/_____
Date