Chemical Survey

Information: This survey is requested to determine the quantity of specific chemical groups used, produced or stored in your facility. Fire Chiefs are required to collect chemical data under the Michigan Occupational Safety and Health Act (MIOSHA), P.A. 154 of 1974, as amended, and the Fire Prevention Code, PA 207 of 1974, as amended.

Instructions: Indicate below whether your site uses or produces any of the chemical types listed. Check all the categories that apply when a chemical has more than one characteristic, (example: both a Class 3 flammable and a Class 6 poison), see definitions. Each chemical group listed in this survey includes a specified quantity. Indicate the quantity category for each chemical group on your site. To complete this survey, you may need to reference Material Safety Data Sheets, SARA Title III reporting forms, along with the attached definitions.
(Note: You must complete each line. Do not leave blanks. If you do not use a chemical group listed, mark "DO NOT HAVE" box.)
When substantial changes occur in the quantity or type of chemical use, manufacture or related storage, a revised a survey must be submitted to the Fire Chief. In addition, a revised survey will be requested periodically as the Fire Chief determines necessary, but at least once every five years.

This survey may be followed-up with a request for more detailed information. This may include a request for Material Safety Data Sheets, chemical lists maintained under the Employee Right To Know provisions of MIOSHA and other information.

Please return this questionnaire as indicated in the attached cover letter.

This site is:

☐ Chemical User – (Chemicals consumed in activities on site)

☐ Chemical Producer – (Chemicals manufactured at this site, includes packaging)

☐ Other – Mark this box if chemicals are stored on site, but not used or produced.
Please Specify (Examples: service station, retail store, storage facility)
_____

Date Completed: _____

Site Address: _____

_____

_____

Name of Premises: _____

Site Telephone: _____

Emergency/Contacts: (Include Private Alarm/Security Companies)

Name/Title	Business Telephone	Home Number
_____	_____	_____
_____	_____	_____
_____	_____	_____

Respond based on the maximum quantity you would have on-site, including storage, at any one time during the year.

Check 1 Box for Each Category

Chemical Type	Specified Quantity	Have at or above Specified Quantity	Have but Below Specified Quantity	DO NOT HAVE
Class 1				
Explosive & Blasting Agents (Not including Class C Explosives)	Any Quantity	☐	☐	☐
Class 2				
Poison Gas	Any Quantity	☐	☐	☐
Flammable Gas	100 gal. water capacity	☐	☐	☐
Nonflammable Gas	100 gal. water capacity	☐	☐	☐
Class 3				
Flammable Liquid	1,000 gallons	☐	☐	☐
Combustible Liquid	10,000 gallons	☐	☐	☐
Class 4				
Flammable Solid (Dangerous when wet)	100 lbs.	☐	☐	☐
Flammable Solid	500 lbs.	☐	☐	☐
Spontaneously Combustible Material	100 lbs.	☐	☐	☐
Class 5				
Oxidizer	500 lbs.	☐	☐	☐
Organic Peroxide	250 lbs	☐	☐	☐
Class 6				
Poison	500 lbs	☐	☐	☐
Irritating Material:				
Liquid	1,000 gal	☐	☐	☐
Solid	500 lbs	☐	☐	☐
Class 7				
Radioactive Material (Yellow III Label)	Any Quantity	☐	☐	☐
Class 8				
Corrosives:				
Liquid	1,000 gal	☐	☐	☐
Solid	500 lbs.	☐	☐	☐
No DOT Category				
Known Human Carcinogen	Any Quantity	☐	☐	☐

HAZARDOUS CHEMICAL DEFINITIONS

Explosives & Blasting Agents – (Not including Class C Explosives) – "Explosives" means a chemical that causes a sudden, almost instantaneous release of pressure, gas, and heat when subjected to sudden shock, pressure, or high temperature. "Blasting Agent" means a material designed for blasting. It must be so insensitive that there is very little probability of: 1) accidental explosion, or 2) going from burning to detonation.
(Example: dynamite, TNT, black powder, detonating cord, liquid –fueled rocket motors, practice ammunition, blasting agents and ammonium nitrate-fuel oil mixtures)

Poison Gas – Extremely dangerous poisons, toxic – substances, liquid or solids (including pastes and semi-solids) co-toxic to man that they are a hazard to health during transportation.
(Examples: hydrogen fluoride chlorine, arsine, and phosgene)

Flammable Gas – A gas that can burn with the evolution of heat and a flame. Flammable compressed gas is any compressed gas of which: 1) a mixture of 13 percent or less (by volume) with air is flammable, or 2) the flammable range with air is under 12 percent.
(Examples: inhibited butadienes, acetylene and propane)

Non-Flammable Gas – Any compressed gas other that a flammable compressed gas. (Examples: carbon dioxide, methyl alcohol, and anhydrous ammonia)

Flammable Liquid – Any liquid having a flashpoint below 100 degrees F (37.8 degrees C), except any mixture having components with flashpoints of 100 degrees F (37.8 degrees C) or higher, the total of which makes up 99 percent or more of the total volume of the mixture. (Examples: gasoline, methyl alcohol, acetone, toluene, and amyl acetate)

Combustible Liquid – Any liquid having a flashpoint at or above 100 degrees F (37.8 degrees C), but below 300 degrees F (113 degrees C), except any mixture having components with flashpoints of 200 degrees F (93.3 degrees C), or higher, the total volume of which make up 99 percent or more of the volume of the mixture. (Example: fuel oils, mineral oils, and peanut oil)

Flammable Solid (Dangerous when wet) – Water reactivate Material (Solid) – Any solid substance (including sludges and pastes) which react with water by igniting or giving off dangerous quantities of flammable or toxic gases. (Sec 171.8)
(Examples: metallic sodium, potassium, and calcium carbide)

Flammable Solid – A solid, other than a blasting agent, or explosive, that is liable to cause fire through friction, absorption or moisture, spontaneous chemical change, or retained heat from manufacturing or processing, or which can be ignited readily and when ignited burns so vigorously and persistently as to create a serious hazard. (Examples: pyroxylin plastics, and magnesium phosphorus)

Spontaneously Combustible Material – (Solid) A solid substance, (including sludges and pastes), which may undergo spontaneous heating or self-burning under normal transportation conditions. These materials may increase in temperature and ignite when exposed to air. (Examples: alkyls, charcoal briquettes, magnesium alkyls, and phosphorus)

Oxidizer – A chemical that initiates or promotes combustion in other materials, thereby causing fire either of itself or through the release of oxygen or other gases. Example being: chlorate, permanganate, inorganic peroxide, or a nitrate, that yields oxygen readily. (Examples: ammonium nitrate, bromine triflouride, and calcium hypochlorite)

Organic Peroxide – An organic compound that contains the bivalent –0-0 structure and which may be considered to be a structural derivate of hydrogen peroxide where one or both the hydrogen atoms has been replaced by an organic radical. (Examples: dibenzoyl peroxide, methyl ethyl ketone peroxide, and peroxyacetic acid)

Poison – Less dangerous poisons, toxic – substances, liquid or solids (including pasted and semi-solids) so toxic to man that they are a hazard to health during transportation. (Examples: aniline, arsenic compounds, carbon tetrachloride, and hydrocyanic acid)

Irritating Material – Liquid and Solid – A liquid or solid substances, which, upon contact with fire or air, gives off dangerous or intensely irritating fumes. (Example: tear gas)

Radioactive Material (Yellow 111 Label) – Any material, or combination of materials, that spontaneously gives off ionizing radiation. (Example: cobalt, uranium hexaflouride, and “yellow cake”)

Corrosives-Liquid and Solid- Any liquid or solid that causes visible destruction or irreversible damage to human skin tissue. Also, it may be a liquid that has a severe corrosion rate on steel. (examples; nitric acid, phosphorus trichloride, sodium hydroxide and sulfuric acid)

Carcinogen- A chemical is considered to be a carcinogen if: 1) it has been evaluated by the International Agency for Research on Cancer (IARC) and found to be a carcinogen or potential carcinogen; or 2) it is listed as a carcinogen or potential in the Annual Report on Carcinogens published by the National Toxicology Program (NTP) (latest edition), or 3) it is regulated by OSHA as a carcinogen.