GUIDELINES TO RECEIVE CHEMICAL AND GAS FROM INDUSTRY

CHEMICAL MANAGEMENT UNIT

1.0 INTRODUCTION

CMU UTM is committed to comply with the rules and regulations enforced by the authorities. Other than procurement process of hazardous substances, receiving gift in terms of chemical and gas from industries are also become the first entry of a hazard into the workplace. All UTM staff and students should adhere to the compulsory requirement below before receiving any chemical and gas from the industry.

2.0 PURPOSE

To guide the operation of chemical and gas acceptance in the campus from industry. It is also to ensure that compliance issues promulgated by applicable regulatory agencies are considered and addressed before a chemical and gas material entered the campus. These agencies include Department of Occupational Safety and Health (DOSH), Department of Environmental (DOE), Energy Commission and Ministry of Health Malaysia.

3.0 RESPONSIBILITY AND ACCOUNTABILITY

The Occupational Safety and Health (OSH) risks associated with the chemical and gas must be identified and managed as part of this acceptance process. All parties involved in the chemical supply, acceptance and/or use of the goods including staff, students and other external parties, are responsible for ensuring the accepting arrangement include OSH considerations and arrangement, with proper communication to the relevant individual.

4.0 REQUIREMENTS

There are a range of specific requirements for regulated chemicals. Check with the relevant authorities.

4.1 Packaging

The donor/industry must ensure that the packaging of the hazardous chemicals that been given meet the following requirements:

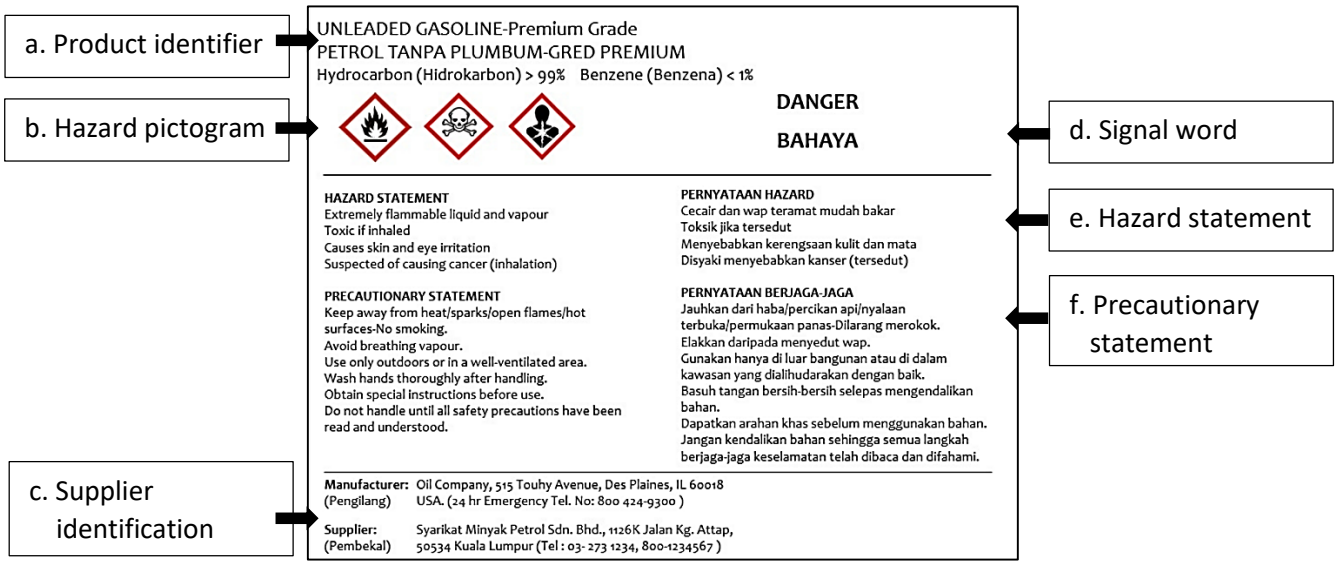
i. The packaging should be able to contain the chemical/substance properly unless a safety device is required to be fitted to the packaging.
ii. The materials used for packaging should be inert to the contents.
iii. The packaging and fastening should be strong and durable.
iv. Replaceable fastening devices should be reliable to ensure that the contents would not escape/spill.
v. The packaging/valve should also be sealed initially whereby the seal could not be repaired once it is opened.

Please make sure the amount of the chemical received is not too much, can be used before the expired date, can be stored safely by the receiver and can be disposed as according to the law.

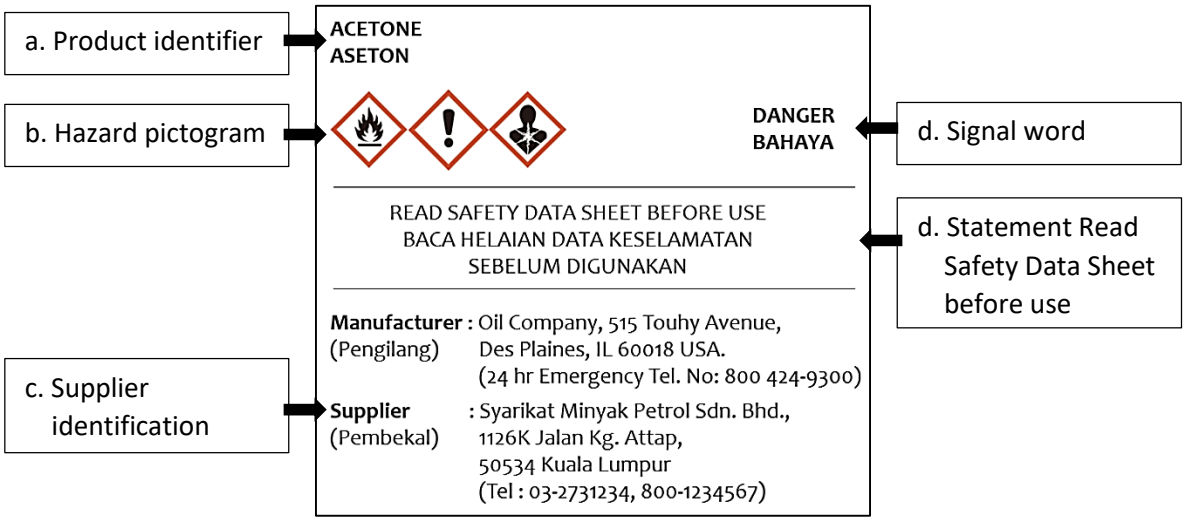
4.2 Labelling (CLASS REG 2013)

The donor/industry is responsible to ensure that the packaging of every hazardous chemical supplied be equipped with legible and inerasable label, containing all this information:

i) For chemical size 125ml and above.



ii) For chemical size below 125ml.



4.3 Safety Data Sheet (SDS)

The donor/industry is responsible to provide an updated Safety Data Sheet (SDS) in Bahasa Malaysia as well as in English for each hazardous chemical/gas or mixture containing hazardous substances. The SDS must contain the following information:

i. Section 1: Identification of the hazardous chemical and of the supplier
ii. Section 2: Hazard identification
iii. Section 3: Composition and information of the ingredients of the hazardous chemical
iv. Section 4: First-aid measures

v. Section 5: Fire-fighting measures
vi. Section 6: Accidental release measure
vii. Section 7: Handling and storage
viii. Section 8: Exposure controls and personal protection
ix. Section 9: Physical and chemical properties
x. Section 10: Stability & reactivity
xi. Section 11: Toxicological information
xii. Section 12: Ecological information
xiii. Section 13: Disposal information
xiv. Section 14: Transportation information
xv. Section 15: Regulatory information and
xvi. Section 16: Other information.

4.4 First Aid, Emergency Response and PPE

Please refer to the SDS supplied with the chemicals and gas.

4.5 Training & Safe Work Procedure

Appropriate training must have been completed by those workers who are going to use the given chemicals and gas. A safe work procedure must be completed for all high risk activities with workers trained and deemed competent in that procedure. Workers undertaking an activity with a high risk chemical and gas must have experience in handling hazardous chemicals and gas.

5.0 ACCEPTANCE OF CHEMICAL & GAS

5.1 Inspection of Chemical upon Arrival

On receipt of the chemical, use this checklist to inspect:

YES/NO	ASPECT
	The special requirements of the chemicals are met. Example: refrigerator, secure/locked storage, availability of LEV, receipt only to an authorised person.
	The amount of chemical receive is in minimal volume and able to be use before the expiry.
	The concentration of the chemical is complying with the regulation and didn't cause excessive exposure to the surrounding.
	Delivered chemicals has clear labelling comply with CLASS 2013 Regulations.
	SDS is given together with the chemicals.
	Packaging is free from contamination

When a chemical arrives into the workplace, please make sure the following aspects are complied:

YES/NO	ASPECT
	Update the chemical inventory and chemical register.
	Ensure the current SDS is accessible.
	Write date of receipt on chemical container.
	Store the chemical correctly and safely.

5.2 Inspection of Cylinder Gas upon Arrival

On receipt of the cylinder gas, use this checklist to inspect

YES/NO	ASPECT
	The condition of the cylinder is in a good condition Example: No dented, bulge or cut on the surface of the cylinder.
	The amount of cylinder gas receive is in minimal numbers and able to be safely store in designated area.
	The cylinder marking are stamped or permanently marked and clear to read.
	Delivered cylinder gas has clear labelling comply with CLASS 2013 Regulations.
	SDS is given together with the cylinder gas.
	Cylinder gas delivered with a valve protection. Example: Valve guard, valve shroud or valve protection cap

When a cylinder gas arrives into the workplace, please make sure the following aspects are complied:

YES/NO	ASPECT
	Update the gas inventory.
	Ensure the current SDS is accessible.
	Label the cylinder gas with designated signage
	Store the cylinder gas correctly and safely.

6.0 SAFE TRANSPORTING ON CAMPUS

Transporting chemicals is one of the riskiest procedures that takes place in the laboratory and around campus as it may lead to accidental release and exposure of chemicals. CMU has established the Guidelines for Safe Transporting of Chemicals on Campus as a reference. Staff are prohibited to transport any of cylinder gas around campus, only supplier or donor are allowing and must follow the Safety Guidelines for Gas Cylinders by DOSH.

7.0 REVIEW AND EVALUATION

Policies are reviewed by Chemical Management Unit at least once every two years to identify and implement opportunities for improvement.

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References	1. Occupational Safety and Health (Use and Standard of Exposure Chemical Hazardous to Health) (USECHH) 2000 Regulations. 2. CLASS 2013 Regulations 3. Guideline for Chemical Procurement, University of Sydney. 4. HWS OHS Purchasing Standard. 5. Chemical Safety Procedure, University of Cambridge. 6. Chemical Procurement Program, Cleveland State University. 7. Occupations Safety and Health Act 1994 (Act 514) 8. Factories and Machinery Act 1967 (Act 139) 9. Safety Guidelines for Gas Cylinders (Construction, Operation and Maintenance) 2020, DOSH 10. Petroleum (Safety Measures) Act 1984
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