



Fire Safety for Laboratories

What is fire safety?

Fire safety consists of a set of guidelines that aims to prevent fire and/or minimise the damages by fire. These guidelines are listed in the **SS641:2019 – Singapore standard for code of practice for fire safety for laboratories using chemicals** which recommends how laboratories should be designed, constructed, operated, and maintained throughout their time of operation to prevent fires from occurring or to keep damages low should a fire occur.

What are the issues to address for fire safety?

- Classification of laboratory unit
- Laboratory unit design and construction
- Fire Protection measures
- Explosion hazard protection measures
- Laboratory ventilation system requirements
- Compressed and liquefied gases management
- Chemical management
- Laboratory operations and apparatus
- Hazard communication

References

- 1) Singapore Standard 641 : 2019. Singapore Standard - Code of practice for fire safety for laboratories using chemicals. Enterprise Singapore.
- 2) D. Rasbash, G. R. B. K. J. W. M. L., 2004. Evaluation of Fire Safety. s.l.:John Wiley & Sons.

Why is fire safety important?

Fire safety is a safeguard that –

- 1) Protects your life and those around you;
- 2) To protect property;
- 3) To prevent reoccurrence or occurrence of a fire by mitigating potential root causes. (D. Rasbash, 2004)

Who should be concerned?

If you are working in a laboratory located within manufacturing facilities e.g., the petrochemical or pharmaceutical sectors, Institutes of Higher Learning (IHL), research and commercial entities or the healthcare sector then you should be concerned!

How can one ensure Fire Safety for laboratories?

Refer to the SS641:2019 – Singapore standard for code of practice for fire safety for laboratories using chemicals for more information.

When is the effective date?

Took effect from 8 Sept 2019 as per SCDF circular CD/FSSD/12/02/03/01.



Process Safety is Everybody's Responsibility!

An initiative of the Process & Engineering Committee

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