

# 52

## LAB SAFETY

# SYMBOLS & MEANING



PDF

Symbol 



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## A. Warning and Hazard symbols in the lab




These signs/symbols indicate some possible threats in that area. If you see such symbols, you must be alert and take extra care while working in such a zone. It is better to be properly instructed to work in areas with these symbols.



Name of Symbol	Symbol	Indication
General Warning	 <p>General Warning</p>	Presence of possibly hazardous materials/environment
Health Hazard	 <p>Health Hazard</p>	Presence of chemical, physical, or biological factors with the potential to have a negative effect on our health

## Biological hazard symbols in the lab

These symbols represent biological substances that have the potential to negatively affect human health or the health of any living beings.


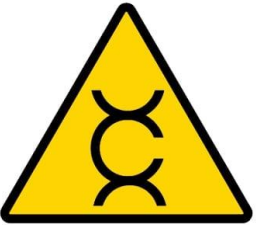

The presence of pathogenic microorganisms, toxins, viruses, virulent proteins, body fluids, and body fluid-contaminated materials is indicated by the biohazard symbol.


Name of Symbol	Symbol	Indication
Biological Hazard		Presence of Biohazardous materials
Biosafety Level 1		<p><b>Presence of biosafety level 1 (Risk Group 1) organisms.</b>          (Presence of organisms that usually don't cause disease in healthy adults but are capable of causing infections, have a minimum potential hazard to environment and laboratory personnel, and have effective treatment measures.)</p>
Biosafety Level 2		<p><b>Presence of biosafety level 2 (Risk Group 2) organisms.</b>          (Presence of organisms capable of causing mild infections, having moderate potential hazard to the environment and laboratory personnel, difficult to spread forming aerosol, and having effective treatment/preventive measures.)</p>

<p>Biosafety Level 3</p>	 <p>BSL-3</p>	<p><b>Presence of biosafety level 3 (Risk Group 3) organisms.</b>  (Presence of organisms capable of causing severe infections and spreading via aerosol. They have high individual risk and moderate community risk with some treatment and prevention measures available.)</p>
<p>Biosafety Level 4</p>	 <p>BSL-4</p>	<p><b>Presence of biosafety level 4 (Risk Group 4) organisms.</b>  (Presence of organisms having a high potential of causing serious infection to individuals and communities. They have a very high transmission rate and have no available treatment and preventive measures.)</p>

## Chemical hazard symbols in the lab

These symbols represent the presence of specific chemical substances/substances with the potential to harm humans or any other living objects.

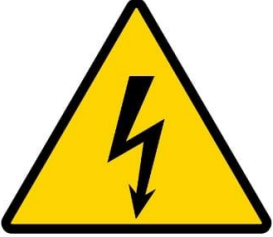


Name of Symbol	Symbol	Indication
Poison/ Poisonous Materials	 Poison	Presence of toxic materials
Carcinogenic	 Carcinogenic	Presence of carcinogenic materials
Corrosive Material Hazard	 Corrosive	Presence of corrosive substances





<p>Harmful Irritants</p>	 <p>Harmful Irritants</p>	<p>Presence of harmful chemicals causing irritations</p>
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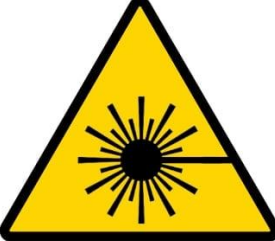



## Physical material hazard symbols in the lab

These symbols represent the presence of a specific substance, condition, or factor with the potential to harm humans or any other living objects in contact with them.

Name of Symbol	Symbol	Indication
High Voltage	 <p>High Voltage</p>	Supply of high-voltage electricity
Electric Hazard	 <p>Electric Hazard</p>	Risk of getting electric shock. (The device might give mild to severe electric shock.)
Cryogenic Hazard	 <p>Cryogenic Hazard</p>	Low-temperature zone




Flammable Material	 <p>Flammable Material</p>	Presence of combustible materials (a substance that can easily burn)
Oxidizing Material	 <p>Oxidizing Material</p>	Presence of oxidizing chemicals
Explosive Material	 <p>Explosive Material</p>	Presence of explosive and/or self-reactive substances
Hot Surface	 <p>Hot Surface</p>	Risk of burning if you touch with naked hands





<p>Ionizing Radiation (Radiation) Hazard</p>	 <p>Radiation Hazard</p>	<p>Presence of radioactive materials emitting ionizing radiation or the presence of electromagnetic waves having the capacity to ionize an atom</p>
<p>Non-ionizing Radiation Hazard</p>	 <p>Non-ionizing Radiation Hazard</p>	<p>Presence of electromagnetic waves that don't have ionizing capacity but have the capacity to excite electrons</p>
<p>UV Radiation Hazard</p>	 <p>UV Radiation Hazard</p>	<p>Presence of UV light</p>
<p>Laser Hazard</p>	 <p>Laser Hazard</p>	<p>Presence of laser radiation</p>




<p>Glassware Hazard</p>	 <p>Glassware Hazard</p>	<p>Presence of broken glasses</p>
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## B. Entry/Working requirement symbols in the lab

These symbols indicate what must be done before entering or working in the zone. They indicate what personal protective equipment must be used by personnel intending to do a specific job in a particular area.

Name of Symbol	Symbol	Indication
Gloves Required	 <p>Gloves Required</p>	Must use protective gloves in this area/while working in this area
Safety Glasses Required	 <p>Safety Glasses Required</p>	Must use protective/safety goggles in this area/while working in this area
Safety Shoes Required	 <p>Safety Shoes Required</p>	Must use closed-toe shoes in this area/while working




<p>Lab Coat Required</p>	 <p>Lab Coat Required</p>	<p>Must wear lab coat (apron) while in this area</p>
<p>Protective Clothing Required</p>	 <p>Protective Clothing Required</p>	<p>Must wear full protective clothing</p>
<p>Respirator Required</p>	 <p>Respirator Required</p>	<p>Must wear a breathing mask/respirator; the presence of contaminated air</p>
<p>Face/Safety Mask Required</p>	 <p>Face Mask Required</p>	<p>Must wear face/dust/safety masks</p>

Face Shield Required	 <p>Face Shield Required</p>	Must wear face shield while working
Hair Protection Required	 <p>Hair Protection Required</p>	Must wear hair protection before working
Hearing Protection Required	 <p>Hearing Protection Required</p>	Must wear a hearing protection device while working

## C. Different stations symbols in the lab

These symbols specify a location/station where a specific task is expected to be performed.

You must only do the work represented by the symbol, but not any other tasks that can be done with the available materials (for instance, you must not wash your hand in the eye washing station).




Name of Symbol	Symbol	Indication
Hand Wash Station	 <p>Hand Wash Station</p>	Place to wash your hands.
Eye Wash Station	 <p>Eye Wash Station</p>	Place to wash your eyes.
Shower Station	 <p>Shower Station</p>	The place to take a shower






<p>Hand Sanitization Station</p>	 <p>Hand Sanitization Station</p>	<p>The place to sanitize your hand</p>
<p>Emergency Meeting Station</p>	 <p>Emergency Meeting Station</p>	<p>The place for all lab personnel to meet for an emergency meeting or during emergency</p>

## D. Location symbols of a specific object in the lab





These symbols indicate the location of specific materials/devices for use on specific occasions. It includes first aid boxes, fire extinguishers, fire blankets, alarm systems, etc.





Name of Symbol	Symbol	Indication
Fire Extinguisher	 <p>Fire Extinguisher</p>	The location where the fire extinguisher is placed
First Aid	 <p>First Aid</p>	The place with the first aid box and materials
Drinking Water	 <p>Drinking Water</p>	Indicates safe water for drinking

Fire Blanket	 <p>Fire Blanket</p>	The location where the fire blanket is placed
Fire Hose	 <p>Fire Hose</p>	The location where the hose with water or any fire retardant is placed
Emergency Bell	 <p>Emergency Bell</p>	Bell to be pressed during an emergency like fire or accident.

## E. Prohibition symbols in the lab

These symbols indicate what actions or objects are not permitted to do or carried within the specific area. These symbols are usually a figure crossed with a red mark.

Name of Symbol	Symbol	Indication
Restricted Entry	 <p>Restricted Entry</p>	Entry is allowed for authorized personnel only
Food and Drink Prohibited	 <p>Food and Drink Prohibited</p>	Not allowed to eat or drink anything in this area
No Open Flame	 <p>No Open Flame</p>	Don't use an open flame in this area; the presence of highly flammable or temperature-sensitive materials.
No light	 <p>No light</p>	Maintain dark, photo-sensitive materials.

<p>No Open Shoes</p>	 <p>No Open Shoes</p>	<p>Not allowed to wear open-toe shoes</p>
<p>No Open Hair</p>	 <p>No Open Hair</p>	<p>No open hair allowed while working here</p>
<p>No Electronics</p>	 <p>No Electronics</p>	<p>Not permitted to use/take any electronic devices</p>
<p>No Gloves</p>	 <p>No Gloves</p>	<p>Gloves must be removed.</p>