

DALMIA CEMENT (B) LIMITED – CEMENT PLANT ARIYALUR SAFETY DEPARTMENT MANUAL



Issued By: M.R Approved By: HOD -SAFETY

WORK INSTRIUCTION FOR SAFETY PRECAUTIONS HANDLING CHEMICALS

- 1.0 In Dalmia Bharat Cement, Ariyalur, Quality Control Laboratory uses mainly the following acids / chemicals, in little quantity.
 - i) Concentrated Hydrochloric Acid
 - ii) Concentrated Nitric Acid
 - iii) Concentrated Sulphuric Acid
 - iv) Concentrated Hydrofluoric Acid
 - v) Methyl Alcohol
 - vi) Ammonia Solution
- 1.1.1 While handling these chemicals, the following precautions are to be taken.
- 1.1.2 The first work to enter inside a chemical lab is to switch "ON" the Exhaust Fan.
- 1.1.3 Know the properties of chemicals to be handled.
- 1.1.4 While handling chemicals, use PVC Gloves and apron.
- 1.1.5 The bottle or container of the chemicals to be brought carefully to the table near the exhaust fan.
- 1.1.6 Read the instructions given on the container carefully and open the container accordingly with the suitable opener key.
- 1.1.7 Keep your face away from the fumes of Acids or chemicals like Ammonia while handling to avoid direct inhalation of fumes and to safe guard eyes / face in case of sudden spurting or spilling of chemicals. Also Acrylic face shield shall be used.
- 1.1.8 While diluting concentrated Hydrochloric/Nitric Acids, add water slowly to the Acid container. But to dilute concentrated Sulphuric Acid, add Acid to water very slowly.
- 1.1.9 Dispose the used chemicals properly by pouring through the chemical resistant sink.
- 1.1.10 Dispose the used chemicals properly by pouring through the chemical resistant sink.
- 1.1.11 All chemicals should have identification label legibly visible.



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1.1.12	Hot Glass ware to be handled with Tongue /wearing gloves. Also it shall not be Cooled suddenly with water.
1.1.13	Avoid taking acid in pipette.
1.1.14	while doing Analysis, required minimum beakers only to be kept on the table.
1.1.15	Beakers containing acid $\!\!\!/$ waste water etc to be kept separately with proper Identification.
1.1.16	All electrical fittings in Laboratory shall be anti-chemical corrosive fittings.
1.1.17	In case of any Acid burn immediately, the part to be cooled with water.