



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

Issue No. 02	Rev. No: 00	Effective Date: 01.11.2019	WI-27(PI-14; AM-8)
Issued By: M.R		Approved By: HOD -SAFETY	
WORK INSTRUICTION 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.**

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**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.**