

# Shenzhen Environmental Printed Circuit Board Company

## Environmental Instruction

### Handling and Storage of Chemicals (EI-10)

**Revision No. : 1**

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## Revision History

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**1.0 Purpose**

To ensure an effective control and comply with the legal requirements on the purchasing, storage, usage and disposal of chemicals, this instruction outlines the practices to be adopted for the control of pollution and effective use of the relevant resources.

**2.0 Scope**

This instruction is applicable to the management of chemicals being used in Shenzhen plant (e.g. oxidising agents,  $\text{NaH}_2\text{PO}_2$  and  $\text{NaHPO}_3$  solution, Sodium Persulphate, Nickel Sulphate and Zinc Chloride, etc.) The issues covered in this technical instruction are categorised into:

- Information and labelling;
- Containers;
- Storage and transportation;
- Handling and Spill Prevention; and
- Inspection and Maintenance

Procedures for management of chemical waste are given in the EI-04 Waste Management.

**3.0 Procedure****3.1 MSDS — Material Safety Data Sheet**

3.1.1 According to the legal and other requirements and the current status of chemical usage in Shenzhen, Plant Manager shall consult with related departments to prepare the MSDS for the Dangerous Goods.

3.1.2 MSDS shall include the following :

- Chemical name
- Composition, information or ingredients
- Hazards identification
- Physical and chemical properties
- Fire-fighting measures
- Toxicological information
- Transportation, handling and storage
- Accidental release response measures
- Disposal considerations

3.1.3 MSDS of the chemicals shall also include information on the use and storage areas of the chemicals. The chemicals shall be used according to the MSDS.

3.1.4 When a new chemical is used in the plant, Purchasing Department shall request the corresponding MSDS of the chemical from suppliers. Then MSDS shall be submitted to EMS Committee and the Production Department shall have a copy of MSDS.

3.1.5 Plant Manager shall review the MSDS at least once and half year to prevent any

missing information.

### 3.2 Purchasing Control

3.2.1 Purchasing Department shall ensure the chemical suppliers possess the corresponding chemical production licenses or permits.

3.2.2 When a new chemical will be used in the plant, Plant Manager shall conduct an evaluation meeting and record in the Environmental Evaluation Meeting Minute. The evaluation shall be carried out on the following aspects of the chemical:

- Physical and chemical properties
- Fire-fighting measures
- Hazardous to health
- Disposal and handling issues etc, and report to EMR

After the approval of EMR, the relevant department can initiate the purchasing procedures.

3.2.3 For environmental control instruction of chemical suppliers, EI-02 Environmental Procurement shall be followed.

### 3.3 Chemicals labelling

3.3.1 Appropriate labels shall be placed on chemical containers. Also, dangerous good labels shall be placed on dangerous chemical containers.

### 3.4 Storage management of Chemicals

3.4.1 According to corresponding legal requirements and MSDS, Production Department shall establish the practices for the storage and management of chemicals. An Environmental Management Checklist shall be established and adopted for the storage area of various chemicals.

3.4.2 Production Department shall submit the Chemical Status Monthly Report to the EMS Committee for reporting chemicals storage status and chemical consumption of Production Department.

3.4.3 The relevant departments shall monitor the storage area of the chemicals. According to FIFO (first in first out) basis, the retention period of chemicals shall be monitored to prevent due date expired of chemicals.

3.4.4 Storage and management on the use of toxic chemical (e.g. Peroxides)

According to legal requirements and MSDS of toxic chemicals (Peroxides), all responsible departments shall carry out the practices on the storage and managing on the use of toxic chemicals.

### 3.5 Disposal of Expired Chemicals

3.5.1 For expired chemicals, Production Department shall pack with original packing and Purchasing Department shall return to suppliers for proper disposal.

### 3.6 Emergency Disposal

3.6.1 When large scale chemical leakage is happened, EP-05 Environmental Emergency Preparedness and Response shall be followed for handling.

## 4.0 **Monitoring and Checking**

4.1 EMS Committee shall monitor the use of chemicals in various departments.

4.2 Production Department shall prepare Chemical Status Monthly report. According to

Chemical Status Monthly Report, the chemical consumption status of various processes shall be analysed. The result shall be kept and submit to EMR at the end of each year.

- 4.3 Annual updating of company objectives, based on previous production activities, conservation of chemicals shall be discussed in order to minimize the resource consumption.

## **5.0 Records**

<b>Record Description</b>	<b>Record Location / Retention Responsibility</b>	<b>Minimum Retention Time</b>
MSDS (Refer to supplier's information)	Purchasing Department / Production Department	3 years
Environmental Evaluation Meeting Minute (Refer to related meeting minutes)	Production Department	3 years
Environmental Management Checklist (Refer to related checklist records)	Production Department	3 years
Chemical Status Monthly Report (Refer to monthly chemical report)	Production Department	3 years
Common Chemicals Classification and Labelling (Refer to related legal requirements and MSDS)	Production Department	3 years

## **6.0 Appendix**

Nil.