
 GOVERNMENT OF DUBAI	Organization Unit Public Health & Safety Department	الوحدة التنظيمية:	 بلدية دبي DUBAI MUNICIPALITY	
	Form sheet title:	Technical Guidelines for Safety Procedures in Metal Finishing Industries		اسم النموذج :
	Doc Ref.	DM-PH&SD-P4-TG23		رقم النموذج :

Safety Procedures in Metal Finishing Industries

Background: Metal finishing activities produce large quantities of waste water and spent chemicals. Waste produced, if carelessly handled or disposed of, may cause a significant threat to people health and society. Ground and surface water contamination would occur due to spills and careless dumping of residues. Liquid waste generated is not safe for land, marine, or sewer disposal. Pre-treatment of waste is required to bring down the concentration of contaminants to the safe levels before off-site disposal. The goal of this guideline is to make the metal finishing industries safer for workers and general public,

Safe Handling and Health Precautions of Chemicals



The following guidelines are meant to cover the general aspects of safe handling of metal finishing chemicals. It is required that every product has to be supplied with a safety data sheet containing detailed information covering each one of the items mentioned below. Should these statements differ from the ones reported in the safety card provided by the supplier, **THE DATA SPECIFIED IN THE MATERIAL SAFETY DATA SHEET OF THE PRODUCT SHALL ALWAYS PREVAIL.**

1. Safe Handling

Most of the chemicals used in metal finishing industries are considered hazardous to humans. While some of these chemicals have acute health effects, many other persistent chemicals cause chronic illnesses. Exposure routes vary from inhalation, which is the most significant route in this case, to ingestion, absorption through skin. Thus, all the employees must be informed of the hazards from the exposure to the contaminant and the precaution necessary to prevent damage to their health.

2. Personal Protective Equipment:

- a. The occupier shall provide the following personal protective equipment
 - Goggles or face shields
 - Appropriate respirator, where mists and hazardous

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gases are generated.

- Gloves- Rubber or PVC
- Protective clothing, helmets, and boots.

The usage of PPE shall be ensured by adequate supervision

- b. An eyewash fountain and shower shall be provided.
- c. The washing facilities with soap and nail brush shall be provided.

3. Storage

- chemicals used should be stored properly as specified in the material safety data sheet to each individual chemical.
- Label all tanks, valves, and pipelines clearly in a language that is understood by all workers.

4. Fires

- Should be extinguished by the use of chemical powder, foam or carbon dioxide extinguishers.

5. Leaks

- Must be stopped immediately.
- Spilled material should be contained by means of sand, soil or other absorbent inert materials and then collected in special containers and treated as hazardous waste.
- Necessary equipment should always be available for the management of the unexpected spillage and leakage of chemicals.



6. First Aid

i. Inhalation

- The injured person shall be immediately removed from the contaminated area and transferred to a clean and ventilated location.
- If breathing stops, artificial respiration will be necessary
- Consult a physician immediately.

ii. Contact with skin

- Wash with plenty of water
- Remove contaminated clothing

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- Consult a physician

iii. Contact with eyes

- Wash with plenty of water for at least 20 minutes.
- Do not apply anything into the eyes unless prescribed by a physician.
- Seek medical attention.

iv. Ingestion

- Do not induce vomiting
- Do not give any milk, or fatty food.
- Nothing shall be given orally to an unconscious person
- Have the injured person attended by a physician immediately

7. No person shall be allowed to smoke, eat food or drink in the process area.

8. Medical Examination

All the employees engaged in metal finishing operations including buffing and polishing operations shall undergo medical examination at the expense of the employer, at Dubai Municipality, Public Health Clinic, Dubai

- i. Initial examination immediately within 30 days of employment
- ii. Annual examination every 12 months.

**FOR FURTHER INFORMATION CONTACT
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