

Presentation of the Medical Compendium of Toxicological Emergencies and the Manual of Industrial Toxicology of Petróleos Mexicanos

Dirección Corporativa de Administración - Subdirección de Servicios de Salud



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Infraestructure in Occupational Health Services.

25

101

8

16

411

29

- Medical Offices in Refineries:
- Medical Offices in Storage and Distribution Terminals:
- Medical Offices in Marine Terminals:
- Medical Offices in Administrative Buildings:
- Medical Offices in Plataforms:
- Medical Offices in Gas Processing Complexes:
- Medical Offices in Petrochemical Complexes:
- Medical Offices in Oil Camps:
- General Physicians and Specialists in Occupational Medicine in the Preventive Occupational Medical Services:
- Emergency Medical Units:

All workers in PEMEX.

PEMEX			SERVICIOS DE INFORMACION O		
				CIFRAS AL	08-02-12
	Plantas Confianza	Plantas Sindicalizado	Transitorios Confianza	Transitorios Sindicalizado	Activos
COR	7,759	17,201	1,157	7,415	33,532
PEP	8,346	29,727	3,925	21,934	63,932
PXR	4,735	33,692	1,675	17,852	57,954
PGB	2,024	8,209	389	4,054	14,676
PPQ	1,684	10,471	238	5,026	17,419
PMI			326		326
BEC			340		340
USPS			924		924
CEN			18		18
A123			71		71
D.V.			1,843		1,843
TOTAL:	24,548	99,300	10,906	56,281	191,035

Nota: Se consideran a derechohabientes que hayan estado vigentes durante el més anterior al corte



PERATIVA



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Objective of the Medical Compendium of Toxicological Emergencies.

To give practical information to provide a rapid and appropriate medical response in the case of acute intoxication.





Definition of Acute Severe Toxics



Chemicals that can cause serious immediate biological effects and / or death in workers intoxicated before 24 hours, from initial contact and / or subsequent.



Content of the Medical Compendium of Toxicological Emergencies

- Message.
- Prologue.
- Clinical Toxicological Integration.
- Chemical Name.
- Synonyms.
- Routes of Absorption.
- Clinical Types of Intoxication: Mild, Moderate And Severe.
- First Aid.
- Antidotal Therapy:
 - Antidote Name .
 - Indications.
 - Mechanism of Action .
 - Relative Contraindications.
 - Complications and Adverse Effects.
 - Presentation and Dosage.
- Glossary.
- Bibliography.





Chemical Groups Analyzed in the Medical Compendium.

• Primary Irritants:

- Ammonia.
- Chlorine.
- Hydrochloric Acid.
- Sulfur Dioxid.
- Sulfuric Acid.
- Mithocondrial Asphyxiants:
 - Hydrogen Sulfide.
 - Hydrocyanic Acid.
 - Acrylonitrile.





Chemical Groups Analyzed in the Medical Compendium.

• Simple Asphyxiants:

- Butane.
- Propane.
- Propylene.
- Nitrogene.
- Caustic Chemicals:
 - Sodium Hydroxide.
 - Potassium Hydroxide.





Chemical Groups Analyzed in the Medical Compendium

- Epoxides:
 - Ethylene Oxide.
- Aliphatic Amines:
 Monoethanolamine.
- Chemicals blocking the Transport of Oxygen:
 - Carbon Monoxide.

Special Chemical:

- Hydrofluoric Acid (corrosive to skin, toxic to the bones).





Principal Recipients.

 Medical and Paramedical Personnel of Preventive Services of Occupational Medicine in Industrial Facilities.

 Emergency Services in Hospitals, Clinics and Medical Offices of PEMEX.





Objective of the Manual of Industrial Toxicology

 To provide toxicological scientific information to medical personnel on the major biological and clinical effects of the chemicals potentially toxic, used, transported and stored in the Mexican Oil Industry, to give the appropriate medical response in case of acute and chronic intoxications.





Content of the Manual of Industrial Toxicology

- Message
- Prologue
- Index
- General Considerations: Toxicogenetics Toxicogenomics Genetic Polymorphisms
- Particular Considerations: Types of Chronic Damage
 - Neoplastic Teratogenic Reproductive Systemic
- List of Chemicals
- Glossary
- Bibliography





Hydrocyanic Acid. Hydrochloric Acid. Hydrofluoric Acid. Sulfuric Acid. Acrylonitrile. Isopropyl Alcohol. Anhydrous Ammonia.





Asbestos. Sulfur. Benzene. Butane. Chlorine. Vinyl Chloride. Chromium. Dichloroethane.





Diesel. Sulfur Dioxide. Commercial Gasoline. Hexane. Sodium Hydroxide. Kerosene. Mercury. Methane. Methanol. Monoethanolamine. Carbon Monoxide.





Light Naphtha. Nitrogen. Ethylene Oxide. Propane. Propylene. Crystalline Silica. Carbon Tetrachloride. Toluene. Arsenic Trioxide. Xylene.





Content for Each Chemical

- Scientific Name.
- CAS Registry.
- Synonyms.
- Physical and Chemical Properties.
- Routes of Absorption.
- Distribution.
 Biotransformation.
- Excretion.
- Clinical Features in Acute Intoxication.
- Clinical Features in Chronic Intoxication.
- Threshold Limit Values.
- Biological Exposure Indices.
- First Aid.
- Antidotal Treatment (if any).











SODIUM NITRITE



CALCIUM GLUCONATE (2.5%)





Conclusions

Petróleos Mexicanos through the development of its activities and processes involve the use, transport and storage of chemicals potentially toxic, hence the importance of the Medical Compendium of Toxicological **Emergencies** and the **Manual of Industrial Toxicology** in order to give the proper response to prevent and control exposure, and in the case of acute or chronic intoxication, to provide the appropriate medical attention.





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