Mossakowski Medical Research Institute, at the Polish Academy of Sciences



OHS INSTRUCTIONS

FOR CLEANING AND MAINTENANCE ACTIVITIES USING CHEMICALS GENERAL COMMENTS

Cleaning and maintenance work, in the course of which chemical agents/preparations, substances and hazardous mixtures are used, may be permitted to employees who have general and job training in occupational safety and health and have a current medical certificate, who are acquainted with occupational safety and health instructions, data sheets of substances/mixtures used and occupational risk assessment related to the hazards of the workplace.

DEFINITIONS

Chemical preparations: mixtures or solutions consisting of at least two chemicals.

Hazardous substances/hazardous mixtures: substances and mixtures classified in one or more of the following categories:

- with explosive properties (also known as explosive substances and mixtures) solids, liquids and
 materials with a paste or gel consistency that violently emit gases as a result of an exothermic
 reaction (including without the participation of oxygen from the air), and such materials that detonate
 under certain test conditions, undergo rapid deflagration or explode when heated in a partially
 enclosed space;
- with oxidizing properties (also called oxidizing substances and mixtures) substances and mixtures whose reactions caused by contact with other substances, especially flammable substances, are highly exothermic reactions;
- 3. **extremely flammable** substances and mixtures in the liquid state with an extremely low flash point and an extremely low boiling point, as well as substances and mixtures in the gaseous state that under normal conditions of pressure and temperature burn in contact with air;

4. highly flammable:

- a) substances and mixtures that, without the supply of energy under normal conditions of pressure and temperature, in contact with air can heat up and consequently ignite,
- b) solid substances and mixtures that, as a result of brief contact with an ignition source, can ignite and the burning or smoldering process continues after the ignition source is removed,
 - c) substances and mixtures in the liquid state with a very low flash point,
- d) substances and mixtures that emit extremely flammable gases in dangerous quantities when in contact with water or moist air;
- 5. **flammable** substances and mixtures in the liquid state with a low flash point;
- 6. **very toxic** substances and mixtures that, if swallowed, inhaled or absorbed through the skin in very small amounts, can cause death or acute or chronic adverse effects on human health;

- 7. **toxic** substances and mixtures that, if swallowed, inhaled or absorbed through the skin in small amounts, can cause death or acute or chronic adverse effects on human health;
- 8. **harmful** substances and mixtures that, if swallowed, inhaled or absorbed through the skin, can cause death or acute or chronic adverse effects on human health;
- 9. corrosive substances and mixtures that in contact with living tissues can cause their destruction;
- 10. **irritants** non-corrosive substances and mixtures that, in case of short-term, prolonged or repeated contact with the skin or mucous membranes, may cause their inflammation;
- 11. **sensitizers** substances and mixtures that, if absorbed into the body by inhalation or through the skin, can cause a state of hypersensitivity, and subsequent exposure to the substance will cause characteristic adverse effects on human health;
- 12. **carcinogens** substances and mixtures that, if ingested, inhaled or absorbed through the skin, can cause cancer or increase its incidence;
- 13. **mutagenic** substances and mixtures that, if ingested, inhaled or absorbed through the skin, may cause hereditary genetic defects or an increase in their incidence;
- 14. **reproductive** toxicants substances and mixtures that, if ingested, inhaled or absorbed through the skin, may cause harmful effects in the offspring, other than genetic defects, or an increase in the incidence of such effects and disorders of human reproductive function or capacity;
- 15. **hazardous to the environment** substances and mixtures that, if released into the environment, pose or may pose an immediate or delayed threat to one or more elements of the environment.

Substances and mixtures belonging to specific categories are assigned the symbols shown in the table

Hazard category of the substance	Symbol
Explosive substances and mixtures	E
Oxidizing substances and mixtures	0
Extremely flammable substances and mixtures	F ⁺
Highly flammable substances and mixtures	F
Flammable substances and mixtures	RIO
Very toxic substances and mixtures	T+
Toxic substances and mixtures	Т
Harmful substances and mixtures	Xn
Corrosive substances and mixtures	С
Irritant substances and mixtures	Xi
Sensitizing substances and mixtures	R42 and/or R43
Carcinogenic substances and mixtures	Car. Cat. (1,2 or 3)
Mutagenic substances and mixtures	Mut. Cat. (1,2 or 3)
Substances and mixtures toxic to reproduction	Repr. Cat. (1,2 or 3)
Substances and mixtures hazardous to the environment	N or R52 and/or R 53

Safety data sheet for a substance/mixture: a document containing a collection of safety-critical information, in particular about the hazards of the substance or mixture, rules for safe use, storage, emergency procedures. For hazardous substances and mixtures, the safety data sheet shall be provided by the entity that places the substance or preparation on the market (seller), upon request of the recipient, free of charge upon the first delivery or when the sheet is updated.

Chemical agents: chemicals harmful to health. This group includes: hazardous substances and preparations, except those hazardous only to the environment, other substances or dusts that pose a risk when inhaled or absorbed through the skin.

Marking – outdated markings may appear on packaging – square pictograms:

Explosive	Corrosive	Acute toxicity
Irritating	Dangerous	Oxidizing
!>	*	
Flammable	Mutagenic	Gases under pressure
		\Leftrightarrow

Applicable pictograms and warning slogans:

physical and o	chemical hazards:	health risks:	
GHS01	- explosive or self-reactive compounds	GHS05	 exhibiting a corrosive effect on the skin cat. 1A. 1B. 1C risk of serious eye damage
	- flammable (liquids/gases/aerosols/solids) - self-heating. self-reactive pyrophoric (solid/liquid) - organic peroxides		- category 1 acute toxicity. 2 or 3

GHS02	- substances/mixtures that release flammable gases on contact with water	GHS06	
GHS03	- oxidizing (gases/liquids/solids)	GHS07	acute toxicity cat. 4 (formerly: harmful substance)skin or eye irritationskin sensitization
GHS04	- gases under pressure (compressed)	GHS08	 carcinogenic, mutagenic or reproductive effects (known as CMR). toxic effects on critical organs at single or chronic exposure respiratory sensitization
	- causing corrosion of metals	environmental risk	- hazardous to the environment, especially posing a threat to the aquatic environment - posing a threat to the ozone layer
GHS05		GHS09	

In addition to the above pictograms, the substance's packaging and safety data sheet must include a warning slogan, a word that informs the reader of the accidental level of danger; two slogans are used:

- **DANGER** (higher level of threat)
- WARNING (lower threat level)

BASIC STEPS BEFORE STARTING WORK

- 1. Before starting work, the employee should:
- get acquainted with the data sheets of the preparations/household chemicals used for cleaning,
- dress in working and protective clothing, footwear and protective equipment provided for use at the workplace (e.g. protective apron, preventive shoes, protective gloves, safety glasses, etc.), and they should remove from their hands all unnecessary items such as jewelry, etc.
- 2. Prepare auxiliary items for the work such as: broom, sweeper, bucket, sponges, dust cloths and other rags for mopping the floor, vacuum cleaner, ladder, garbage bags or trash can, powders, washing and cleaning liquids, etc.

- 3. Prepare the materials needed during the work (e.g., liquids, lotions, gels cleaners, disinfectants, for cleaning sanitary facilities, floors, windows, furniture, elevator, etc.).
- 4. Check the workstation space, i.e. the condition of the floor, electrical wiring, lighting, plugs, etc.
- 5. Make sure that starting work will not cause danger to other people in the vicinity.
- 6. Remove unnecessary items from the position.
- 7. In the event of defects, damage, do not undertake work, notify the supervisor to eliminate the danger, and after removal, resume work.
- 8. If no hazards are found at the particular workstation, the employee can proceed with the tasks.

ESSENTIAL ACTIVITIES DURING WORK

While working, the employee should:

- 1. Strictly adhere to the recommendations of the safety data sheets of the preparations/chemicals used for cleaning, as well as the instructions and guidance of superiors.
- 2. Concentrate all their attention exclusively on the activities being performed; work at a speed that corresponds to the natural rhythm of work.
- 3. Perform only the work required by the job description and ordered by the immediate supervisor.
- 4. Store materials used during the work process so that they do not pose any accident hazards; tools should be put away in strictly designated places.
- 5. If the employee has to use a ladder, platforms or steps while working, they must make sure that they are technically sound and that they should be set up in accordance with applicable regulations.
- 6. Work at height should be performed in such a way as not to disturb other workers performing their tasks.
- 7. If an employee has to leave their workstation, they are obliged to check that the work tools left behind will not create hazards, for example, for other employees passing by.
- 8. If there is any doubt about how to perform a task, the employee should ask the supervisor for detailed instructions work can be resumed after the doubt is removed.

PROHIBITED ACTIVITIES

- 1. Do not use inappropriate and unsafe working methods so as not to endanger yourself or the environment.
- 2. Do not work without prescribed personal protection.
- 3. Do not perform work at height (on a ladder, platform, etc.) when you are unwell, you should report the incapacity to your supervisor at that time, who will decide on the further course of the employee's work.
- 4. Do not allow others to work at your station without your supervisor's knowledge.
- 5. Do not touch live electrical wires.
- 6. Do not disturb others at work, do not obstruct the passage and access to the workstation, fire equipment and electrical switches.
- 7. Do not inhale dust/smoke/gas/mist/vapor/sprayed liquid/crushed product, etc.
- 8. Do not ingest any chemical agents/mixtures.
- 9. Do not keep products/chemicals close to heat/fire and ignition sources.
- 10. Do not allow agents/preparations used to get into the eyes, on the skin or on clothing.

- 11. Do not mix substances/chemicals with other household chemical products.
- 12. Do not consume food or drink (meals) and do not smoke or use open flames while working.
- 13. Do not leave a disorganized space, used rags, etc. after finishing work.
- 14. If you accidentally spilled/dispersed a chemical agent/preparation after cleaning it up, wash your hands thoroughly before continuing work.

POST-WORK ACTIVITIES

Upon completion of work, the employee should:

- 1. Wash their hands thoroughly.
- 2. Put the workstation in order. Arrange tools and auxiliary instruments (buckets, brushes, ladders) in the designated place.
- 3. Store the chemicals used in original packaging with original labels and properly store them in places inaccessible to third parties.
- 4. Clean the personal protection used and put it away in its permanent place of storage.
- 5. Ensure that the position and equipment left behind will not create any hazards to the environment.
- 6. Turn off all electrical appliances and lock windows and doors.
- 7. Empty trash garbage cans into designated containers.

PLEASE NOTE !!!

- 1. The supervisor must be informed of all circumstances that may endanger the safety of the employee or bystanders. In the event of finding oneself in immediate danger as a result of the workplace's failure to comply with health and safety rules, the employee has the right to refrain from work (they retain the right to wages, but may not refuse to undertake other equivalent work when immediate removal of hazards in the previously performed work is not possible).
- 2. After finishing work, the keys of the cleaned rooms should be handed over at the gatehouse.
- 3. These instructions apply to employees engaged in cleaning, as well as those performing these activities on an ad hoc basis.

THE RULES OF CONDUCT IN EMERGENCY SITUATIONS THAT POSE A THREAT TO THE LIFE OR HEALTH OF EMPLOYEES

1. Depending on the product used during operation, there may be various potential risks – adverse health effects, and the most common include:

contact with the eye - and adverse effects may include: pain or irritation, tearing, redness;

- **inhalation** and adverse effects can include: respiratory irritation, coughing;
- skin contact and adverse effects may include: pain or irritation, redness, blistering may occur;
- ingestion and adverse effects may include: burning in the mouth and esophagus, stomach pain, less commonly causes burning and damage to the mouth, mucous membranes, esophagus, gastrointestinal tract or the risk of perforation of the walls of the stomach and esophagus.
- 2. The provision of first aid depends on the type of chemical agent/preparation, substance or hazardous mixture that led to the danger. The methods of first aid are described in the data sheets with which employees are familiar, and if there is concern about whether the procedure is appropriate, the Emergency Medical Service should be called.

3. Report any accident that occurs to the supervisor, and if there is an accident at work, leave the workplace in the condition in which the accident occurred until the arrival of the accident team.

In the event of an accident:

- provide first aid to the victim,
- if necessary, call for medical assistance,
- notify superiors.

In the event of a fire, you should:

warn those within the danger area,

- if necessary, turn off the electricity supply,

at the same time:

- make a decision to evacuate people.
- alert the fire department,
- notify superiors of the fire,
- if necessary, proceed to carry out firefighting with handheld firefighting equipment.

During the firefighting operation, the principle of absolute obedience to the instructions of the leader of the rescue and firefighting operation applies.

FOR EMERGENCIES, CALL:

-Ambulance Service, phone: 999 or 112

- Fire Department, phone: 998 or 112

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