

PUBLIC COMPANY ORLEN LIETUVA

APPROVED BY
Director's of Quality, Labor Safety
and Environmental Control
16 March, 2016
Order No. TV1(1.2-1)-75

PROCEDURE FOR STORAGE AND HANDLING OF HAZARDOUS CHEMICAL SUBSTANCES AND MIXTURES BDS-17

I. GENERAL PROVISIONS

Purpose and scope of application

1. The purpose of this Procedure is to establish the requirements for storage and handling of hazardous chemical substances and mixtures at work.
2. The requirements of this Procedure must be followed by all Public Company ORLEN Lietuva (hereinafter – the Company) employees and, pursuant to respective contract provisions, by contractors involved in storing and handling of hazardous chemical substances and mixtures in the territory of the Company.
3. The requirements established herein shall not apply to:
 - 3.1. Wastes;
 - 3.2. Radioactive materials;
 - 3.3. Crude oil and petroleum products contained in process units or process vessels (e.g., pipelines, tanks, towers, etc.);
 - 3.4. Transportation of hazardous chemical substances and mixtures by road or railway.

II. REFERENCES

4. This Procedure shall apply in conjunction with the below listed legal acts (as amended to date):
 - 4.1. Law on Chemical Substances and Preparations of the Republic of Lithuania, as passed on 18 April 2000, No. VIII-1641;
 - 4.2. Law on Safety and Health at Work of the Republic of Lithuania No. IX-1672, as passed on 1 July 2003;
 - 4.3. General Fire Safety Regulations, as approved with Order No. 64 as of 18 February 2005 by the Director of Fire and Rescue Department under the Ministry of the Interior (new revision approved with Order No. 1-233 as of 27 July 2010 by the Director of Fire and Rescue Department under the Ministry of the Interior) (*Official Gazette*, 19 August 2010, No. 99-5167);
 - 4.4. Regulations on Protecting Employees from Exposure to Chemical Agents at Work, as approved with Order No. 97/406 as of 24 July 2001 by the Minister of Social Security

and Labor and Minister of Health Care of the Republic of Lithuania (*Official Gazette*, 2001, No. 65-2396; 2005, No. 55-1907);

4.5. Regulation (EC) No.1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemical Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (OJ 2006 L 396, p.1) (hereinafter – Regulation (EC) No. 1907/2006);

4.6. Regulation (EC) No.1272/2008 of the European Parliament and of the Council on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006 (OJ 2008 L 353, Art. 1) (hereinafter – Regulation (EC) No. 1272/2008);

4.7. Commission Regulation (EU) No. 453/2010 amending Regulation (EC) No. 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

III. TERMS AND DEFINITIONS

5. The following are the terms used herein and definitions thereof:

Chemical substance – a natural or artificial chemical element or a compound of chemical elements, including any additive necessary to preserve its stability and any impurity deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition.

Chemical mixture (preparation) – a mixture or solution composed of two or more chemical substances.

Label – an article of certain size and shape (paper, plastic tag or leaflet), affixed to a package (container) providing for information about the chemical substance or preparation (mixture).

Handling – storage, loading or pouring of chemical substances and mixtures (preparations) into containers, their reloading from one container to another, moving to a different location, mixing or disposal.

Hazardous chemical substances and mixtures (preparations) – chemical substances and mixtures assigned to one or several hazard classes and categories as established in Regulation (EC) No. 1272/2008 (*see Attachment No. 1*).

Hazard pictogram – an image that includes a symbol and other graphical elements, e.g., frame, background or specific colors, intended to provide information about the posed threat (*see Attachment No. 1*).

Risk phrase – a phrase assigned to a certain hazard class or category and intended to give information about the nature of hazard (also the level of hazard, where applicable) posed by the hazardous substance or mixture (preparation).

Safety phrase – a phrase that describes safety precautions intended to minimize or prevent the negative effects arising from the handling or disposal of the hazardous chemical substance or mixture (preparation).

Storage – keeping, storing of hazardous chemical substances and mixtures (preparations) in buildings, premises and sites intended for the particular purpose.

Safety data sheet – certain information about the chemical substance and mixture (preparation) that can be referred to for taking precautions concerning health and safety at a workplace, also protection of the environment.

IV. DUTIES AND RESPONSIBILITIES

6. Employees involved in the handling and/or storage (warehousing) of hazardous chemical substances and mixtures (preparations) must:

6.1. Prior to starting any work, get familiar with and follow the safety data sheet of the to-be-handled and/or stored chemical substance or mixture (preparation);

6.2. When handling a hazardous chemical substance or mixture (preparation), use the personal protective equipment specified in the safety data sheet of this chemical substance or mixture (preparation);

6.3. Discontinue works and immediately report this to the immediate superior in case:

6.3.1. The working environment has been contaminated with hazardous chemical substances or mixtures (preparations) (leakage, spill, gas release, etc.);

6.3.2. Labels on the packages (containers) of hazardous chemical substances and mixture (preparations) are illegible or in a language(s) other than Lithuanian.

7. Managers of organizational units must:

7.1. For each job position involved in the handling and/or storage of hazardous chemical substances or mixtures (preparations), develop the lists of safety data sheets issued for hazardous chemical substances or mixtures (preparations) (hereinafter – the list) (**see Attachment No. 3**) that the employees must get familiar with, also revise and update them at least once a year;

7.2. Following the developed/updated list, familiarize all the concerned employees with the safety data sheet of each hazardous chemical substance or mixture (preparation) before starting the work, then periodically (at least every 12 (twelve) months), by making respective entries in the Logbook of Workplace Indoctrinations;

7.3. Prior to handling a new hazardous chemical substance or mixture (preparation), familiarize the concerned employees with the safety data sheet of the new hazardous substance or mixture (preparation) by way of an additional indoctrination to be signed off by the employees in the Logbook of Workplace Indoctrinations;

7.4. Keep safety data sheets of hazardous chemical substances and mixtures (preparations) in a location that is known and accessible to the employees;

7.5. Provide the employees with appropriate personal protective equipment as well as equipment suitable for working with hazardous chemical substances and mixtures (preparations), also establish the procedure for servicing and maintenance of such equipment to ensure occupational health and safety;

7.6. Minimize the duration of work by the employees that are or may be exposed to hazardous substances or mixtures (preparations);

7.7. Accept hazardous chemical substances or mixtures (preparations) to an organizational unit only when in proper packages with labels on them and enclosed with safety data sheets meeting 10 the above requirements.

V. REQUIREMENTS FOR STORAGE OF HAZARDOUS CHEMICAL SUBSTANCES AND MIXTURES (PREPARATIONS)

8. General requirements for storage places

8.1. Hazardous chemical substances or mixtures (preparations) must be stored only in buildings, premises and/or sites that have been designed, constructed and equipped for the particular purpose.

8.2. Storage facilities must be designed to prevent access by non-authorized persons to the hazardous chemical substances and mixtures (preparations) stored at such. Entries must display prohibitory OHS signs 'AUTHORIZED PERSONNEL ONLY'.

8.3. Storage facilities must be equipped with the collective protective equipment (e.g., eye flushing fluid, emergency shower, etc.) as listed in the safety data sheets of the stored hazardous chemical substances and mixtures (preparations).

8.4. Depending on the nature of the stored hazardous chemical substances and mixtures (preparations), storage areas must be marked with the respective warning sign (**see Attachment No. 4**).

8.5. It is forbidden to obstruct the windows, doors, passages, and gates of storage facilities.

8.6. It is forbidden to leave electric forklifts, motor vehicles parked and to charge their batteries at storage facilities.

9. General requirements for storage of hazardous chemical substances and mixtures (preparations)

9.1. Hazardous chemical substances and mixtures (preparations) must be stored in groups subject to their extinguishing media (water, foam, etc.) and in accordance with the information provided in respective safety data sheets.

9.2. Hazardous chemical substances and mixtures (preparations) that actively react with water must be stored in a separate room of a warehouse, in tight containers, at least 15 cm above the floor level.

9.3. Packed (in drums, bags, etc.) hazardous chemical substances and mixtures (preparations) must be kept on shelves or in stacks. When stacked, packages must be placed on wood or other kind of pallets.

9.4. When hazardous chemical substances and mixtures (preparations) are placed on shelves or in stacks, the signs indicating the top of a package must be observed. Packages shall be stacked so that the package side displaying the label and hazard symbol would be facing the passage.

9.5. At storage places with the area of less than 200 m², the passages between shelves, stacks, also spaces between them and the closest wall protrusions must be 0.8 m wide at least and unobstructed.

9.6. At warehouses with the area of more than 200 m²:

9.6.1. Passages between shelves and stacks must be at least 1.2 m, and spaces between stacks and the most protruding wall constructions must be at least 0.8 m;

9.6.2. The places for storing hazardous chemical substances and mixtures (preparations) other than on shelves must be marked with floor marking strips.

9.7. It is prohibited to pack, pour and de-gasify hazardous chemical substances and mixtures (preparations) at general-purpose premises of warehouses.

9.8. Hazardous chemical substances and mixtures (preparations) must be stored in their original (e.g., metal, glass or plastic) packaging.

9.9. It is prohibited to keep empty containers in premises where flammable substances and mixtures are stored.

9.10. Storage areas for corrosive substances and mixtures must have neutralizing agents in stock.

VI. GENERAL REQUIREMENTS FOR HANDLING HAZARDOUS CHEMICAL SUBSTANCES AND MIXTURES (PREPARATIONS)

10. General requirements for safety data sheets:

10.1. Safety data sheets must be available in the Lithuanian language.

10.2. Safety data sheets must comply with the requirements set forth in the document referred to in Item 4.7.

10.3. Use of safety data sheets prepared (issued) / updated before 1 December 2001 is prohibited at the Company.

10.4. The date of issue/revision of a safety data sheet must be indicated in the headline of a safety data sheet.

11. Only hazardous chemical substances and mixtures (preparations) whose packages are affixed with labels in the Lithuanian language can be used at a workplace.

12. If the work requires to place a hazardous chemical substance or mixture (preparation) into a container other than its original package, the new package (container) must be selected according to the information provided in the safety data sheet of such hazardous chemical substance or mixture (preparation) and respectfully labeled, as per **Attachment No. 5**.

13. Hazardous chemical substances and mixtures (preparations) must be transferred, injected (dosed) or reloaded using only the devices and equipment (either manual or mechanical) intended for that particular purpose (e.g., pumps, etc.).

14. Each time hazardous chemical substances and mixtures (preparations) are transferred from one container to another, special collection trays must be placed underneath at the points of potential spills.

15. It is prohibited to use equipment and devices of poor condition for the transfer, injection (dosing) and other reloading operations of hazardous chemical substances and mixtures (preparations).

16. The premises where hazardous chemical substances and mixtures (preparations) are handled must have ventilation with adequate air circulation to ensure that concentrations of such substances in the air of the working environment do not exceed the exposure limits.

17. The workplaces where corrosive substances and mixtures are handled must have an emergency shower and an eye flushing station (hereinafter – emergency washing equipment) located at a distance of not more than 50 meters. If no stationary emergency washing equipment is available within the given distance, portable emergency washing equipment must be used. Prior to starting any work, the effectiveness of the emergency washing equipment must be verified (if such functions properly, is accessible, etc.).

18. The quantities of hazardous chemical substances and mixtures (preparations) kept at work places and other areas not designated for storage of hazardous chemical substances and mixtures (preparations) must not exceed the quantities consumable during a single shift.

19. Before returning the packaging (drum, container, etc.) of used-up hazardous chemical substances and mixtures (preparations) to the Central Warehouse of the Company, heads of organizational units of the Company must arrange for:

19.1. the cleanup (washing, steam-out) of such packaging;

19.2. removal of all labels from the packaging.

20. Before delivering spent catalyst or other hazardous chemical substances and mixtures (preparations) used for production process to the Central Warehouse of the Company, heads of organizational units of the Company must:

20.1. agree on the terms of delivery of such hazardous substances with the Head of the Central Warehouse of the Company;

20.2. submit respective safety data sheet to the Head of the Central Warehouse of the Company;

20.3. mark the packaging with the label as per **Attachment No. 5**, and make an additional entry 'USED' on such.

21. Spent hazardous chemical substances and mixtures (preparations) must be handled according to the effective Waste Management Rules of the Company.

22. Domestic cleaning agents/disinfectants must be used in accordance with the requirements provided on their labels.

23. When in laboratories, hazardous chemical substances and mixtures (preparations) (e.g., reagents) must be handled in accordance with the technical, methodical documentation (e.g., ASTM, LST, EN, ISO, GOST, TC).

VII. EMERGENCY PROCEDURES

24. Any incidents or accidents during the storage or handling of hazardous chemical substances and mixtures (preparations) shall be reported as follows:

24.1. to Company Dispatcher – the single emergency phone number 3333;

24.2. to the immediate superior.

25. Isolation, neutralization, collection or any other handling of hazardous chemical substances and mixtures (preparations) must be performed in accordance with the requirements of respective safety data sheets.

26. Collected, neutralized, obsolete, unidentified hazardous chemical substances and mixtures (preparations), contaminated containers, etc., must be kept separately from other hazardous chemical substances and mixtures (preparations) and handled in accordance with the effective Waste Management Rules of the Company.

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2016-03-04 Public Company ORLEN Lietuva
and Handling of

Procedure for Storage
Hazardous Chemical Substances and Mixtures BDS-17
Attachment No. 1

Hazard categories and hazard pictograms of hazardous substances and mixtures according to Regulation (EC) No. 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures.

HAZARD CATEGORIES, HAZARD PICTOGRAMS

Hazard pictogram	Hazard classes and categories	
	Corrosion	Corrosive to metals (hazard category 1), Skin corrosion (hazard categories 1A, 1B, 1C), Serious eye damage (hazard category 1).
	Environment	Hazardous to Aquatic Environment (Acute Category 1) (Chronic Category 1, 2).
	Gas cylinder	Gases under pressure, Compressed gases; Liquefied gases; Refrigerated liquefied gases; Dissolved gases.
	Exclamation mark	Acute toxicity (oral, dermal, inhalation) (hazard category 4), Skin irritation (hazard category 2), Eye irritation (hazard category 2), Skin sensitization (hazard category 1), Specific target organ toxicity — single exposure (hazard category 3) Respiratory tract irritation, Narcotic effect.
	Exploding bomb	Unstable explosives, Self-reactive substances and mixtures, (Types A, B), Organic peroxides (Types A, B).
	Flame	Flammable gases (hazard category 1), Flammable aerosols, (hazard categories 1, 2), Flammable liquids (hazard categories 1, 2, 3), Flammable solids (hazard categories 1, 2), Self-reactive substances and mixtures (Types B, C, D, E, F), Pyrophoric liquids (hazard category 1), Pyrophoric solids (hazard category 1), Self-heating substances and mixtures (hazard categories 1, 2), Substances and mixtures, which in contact with water, emit flammable gases (hazard categories 1, 2, 3), Organic peroxides, (Types B, C, D, E, F).
	Flame over circle	Oxidizing gases (hazard category 1), Oxidizing liquids (hazard categories 1, 2, 3), Oxidizing solids (hazard categories 1, 2, 3).
	Hazards to health	Respiratory sensitization (hazard category 1), Germ cell mutagenicity (hazard categories 1A, 1B, 2), Carcinogenicity (hazard categories 1A, 1B, 2), Reproductive toxicity (hazard categories 1A, 1B, 2), Specific Target Organ Toxicity — single exposure (hazard categories 1, 2), Specific Target Organ Toxicity — repeated exposure (hazard categories 1, 2), Aspiration hazard (hazard category 1).
	Skull and cross bones	Acute toxicity (oral, dermal, inhalation), hazard categories 1, 2, 3.

Hazard category definitions:

Explosive substance or mixture – a solid or liquid substance or mixture of substances which is in itself capable by chemical reaction of producing gas at such a temperature and pressure and at such a speed as to cause damage to the surroundings.

Flammable gas – gas or gas mixture forming a flammable mixture with air at the temperature of 20 °C and at standard pressure of 101.3 kPa.

Oxidizing gas – any gas or gas mixture which, generally by contacting with oxygen, cause or contribute to the combustion of another material.

Gases under pressure – gases which are contained in a receptacle at a pressure of 200 kPa (gauge) or more, or which are liquefied or liquefied and refrigerated. Such comprise compressed gases, liquefied gases, dissolved gases and refrigerated liquefied gases.

Flammable liquid – a liquid with a flash point of not more than 60°C.

Flammable solid – a solid substance which is readily combustible, or may cause or contribute to fire through friction.

Self-reactive substances or mixtures – thermally unstable liquid or solid substances or mixtures liable to undergo a strongly exothermic decomposition even without participation of oxygen (air). This definition excludes substances and mixtures classified according to this Part as explosives, organic peroxides or as oxidizing agents.

Pyrophoric liquid – a liquid substance or mixture which, even in small quantities, is liable to ignite within five minutes after coming into contact with air.

Pyrophoric solid – a solid substance or mixture which, even in small quantities, is liable to ignite within five minutes after coming into contact with air.

Self-heating substance or mixture – a liquid or solid substance or mixture, other than a pyrophoric liquid or solid substance, which, by reaction with air and without energy supply, is liable to self-heat; this substance or mixture differs from a pyrophoric liquid or solid as it ignites only when in large amounts (kilograms) and after long periods of time (hours or days).

Substances or mixtures which, when in contact with water, emit flammable gases – solid or liquid substances or mixtures which, upon interaction with water, are liable to become spontaneously flammable or to give off flammable gases in dangerous quantities.

Oxidizing liquid – a liquid substance or mixture which, though not necessarily combustible while in itself, may, generally by yielding oxygen, cause or contribute to the combustion of another material.

Oxidizing solid – a solid substance or mixture which, though not necessarily combustible while in itself, may, generally by yielding oxygen, cause or contribute to the combustion of another material.

Organic peroxides – liquid or solid organic substances which contain the bivalent -O-O- structure and may be considered derivatives of hydrogen peroxide, where one or both of the hydrogen atoms have been replaced with organic radicals. Organic peroxides are thermally unstable substances or mixtures, which can undergo exothermic self-accelerating decomposition.

Substance or mixture which is corrosive to metals – a substance or a mixture which, by chemical action, will materially damage or even destroy metals.

Acute toxicity – adverse effects occurring following oral or dermal administration of a single dose of a substance or a mixture, or multiple doses given within 24 hours, or an inhalation exposure for 4 hours.

Skin corrosion – causing of irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis, following the application of a test substance for up to 4 hours.

Skin irritation – causing of reversible damage to the skin following the application of a test substance for up to 4 hours.

Serious eye damage – causing of tissue damage in the eye, or serious physical decay of vision upon application of a test substance to the anterior surface of the eye which (damage/decay) is not fully reversible within 21 days from the application.

Eye irritation – the production of changes in the eye following application of a test substance to the anterior surface of the eye, which are fully reversible within 21 days from the application.

Respiratory sensitizer – a substance that will lead to hypersensitivity of the airways following inhalation of the substance.

Skin sensitizer – a substance that will lead to an allergic response following skin contact.

Germ cell mutagenicity – a permanent change in the amount or structure of the genetic material in a cell. These are agents giving rise to an increased occurrence of mutations in populations of cells and/or organisms.

Carcinogen – a substance or mixture of substances which induce cancer or increase its incidence.

Reproductive toxicity - includes adverse effects on sexual function and fertility in adult males and females, as well as developmental toxicity in the offspring. Reproductive toxicity is subdivided under two main headings:

- a) adverse effects on sexual function and fertility;
- b) adverse effects on development of the offspring.

Specific target organ toxicity (single exposure) – specific, non lethal target organ toxicity arising from a single exposure to a substance or mixture.

Specific target organ toxicity (repeated exposure) – specific, target organ toxicity arising from a repeated exposure to a substance or mixture.





Aspiration hazard – substances or mixtures that may pose an aspiration toxicity hazard to humans.

Acute aquatic toxicity – the intrinsic property of a substance to be injurious to an organism in a short-term exposure to that substance.


Chronic aquatic toxicity – the intrinsic property of a substance to cause adverse effects to aquatic organisms during exposures which are determined in relation to the life-cycle of the organism.

Substance hazardous to the ozone layer – a substance which, on the basis of the available evidence concerning its properties and its predicted or observed environmental fate and behaviour may present a danger to the structure and/or the functioning of the stratospheric ozone layer.

Hazard symbols and references for hazardous chemical mixtures (preparations), as per Article 61 (4) of Regulation (EC) No. 1272/2008, effective through to 1 June 2017.

Hazard category	Risk phrases	Hazard symbol
<u>Explosive preparations</u> – solid, liquid, pasty or gelatinous preparations which may also react exothermically without atmospheric oxygen thereby quickly evolving gases, and which, under defined test conditions, detonate, quickly deflagrate or upon heating explode when partially confined.	R2: Risk of explosion by shock, friction, fire or other sources of ignition. R3: Extreme risk of explosion by shock, friction, fire or other sources of ignition.	
<u>Oxidizing preparations</u> - preparations which give rise to a highly exothermic reaction in contact with other substances, particularly flammable substances.	R7: May cause fire. R8: Contact with combustible material may cause fire. R9: Explosive when mixed with combustible material.	
<u>Extremely flammable preparations</u> - liquid preparations having an extremely low flash-point and a low boiling-point and gaseous preparations which are flammable in contact with air at ambient temperature and pressure.	R12: Extremely flammable.	
<u>Highly flammable preparations:</u> a) preparations which may become hot and finally catch fire in contact with air at ambient temperature without any application of energy; b) solid preparations which may readily catch fire after brief contact with a source of ignition and which continue to burn or to be consumed after removal of the source of ignition; c) liquid preparations having a very low flash-point; d) preparations which, in contact with water or damp air, evolve highly flammable gases in dangerous quantities.	R11: Highly flammable. R15: Contact with water liberates extremely flammable gases. R17: Spontaneously flammable in air.	
<u>Flammable preparations</u> - liquid preparations having a low flash-point.	R10: Flammable.	-
<u>Very toxic preparations</u> - preparations which in very low quantities cause death or acute or chronic damage to health when inhaled, swallowed or absorbed via the skin.	R26: Very toxic by inhalation. R27: Very toxic in contact with skin. R28: Very toxic if swallowed. R39: Danger of very serious irreversible effects.	
<u>Toxic preparations</u> - preparations which in low quantities cause death or acute or chronic damage to health when inhaled, swallowed or absorbed via the skin.	R23: Toxic by inhalation. R24: Toxic in contact with skin. R25: Toxic if swallowed. R39: Danger of very serious	

	irreversible effects. R 48: Danger of serious damage to health by prolonged exposure.	
<u>Harmful preparations</u> – preparations which may cause death or acute or chronic damage to health when inhaled, swallowed or absorbed via the skin.	R20: Harmful by inhalation. R21: Harmful in contact with skin.R22: Harmful if swallowed. R 48: Danger of serious damage to health by prolonged exposure.R65: Harmful: may cause lung damage if swallowed. R68: Possible risk of irreversible effects.	
<u>Corrosive preparations</u> – substances and preparations which may, on contact with living tissues, destroy them.	R34: Causes burns. R35: Causes severe burns.	
<u>Irritant preparations</u> - preparations which, through immediate, prolonged or repeated contact with the skin or mucous membrane, may cause inflammation.	R36: Irritating to eyes. R37: Irritating to respiratory system.R38: Irritating to skin. R41: Risk of serious damage to eyes.	
<u>Sensitizing preparations</u> - preparations which, if they are inhaled or if they penetrate the skin, are capable of eliciting a reaction of hyper-sensitization such that on further exposure to the substance of preparation, characteristic adverse effects are produced.	R42: May cause sensitization by inhalation.	
<u>Carcinogenic preparations</u> – preparations which, if they are inhaled or ingested or if they penetrate the skin or in any other way penetrate the human body, may induce cancer or increase its incidence.	1st and 2nd categories: R45: May cause cancer. R49: May cause cancer by inhalation.	
	3rd category: R40: Limited evidence of a carcinogenic effect.	
<u>Mutagenic preparations</u> – preparations which, if they are inhaled or ingested or if they penetrate the skin or in any other way penetrate the human body, may induce heritable genetic defects or increase their incidence.	1st and 2nd categories: R46: May cause heritable genetic damage.	
	3rd category: R68: Possible risk of irreversible effects.	
<u>Preparations which are toxic for reproduction</u> - preparations which, if they are inhaled or ingested or if they penetrate the skin, may produce, or increase the incidence of, non-heritable adverse effects in the progeny and/or an impairment of male or female reproductive functions or capacity.	1st and 2nd categories: R60: May impair fertility. R61: May cause harm to the unborn child.	
	3rd category: R62: Possible risk of impaired fertility. R63: Possible risk of harm to the unborn child.	

<p><u>Preparations which are dangerous for the environment</u> – preparations which, were they to enter the environment, would present or may present an immediate or delayed danger for one or more components of the environment.</p>	<p>R50: Very toxic to aquatic organisms. R51: Toxic to aquatic organisms. R52: Harmful to aquatic organisms. R53: May cause long-term adverse effects in the aquatic environment. R54: Toxic to flora. R55: Toxic to fauna. R56: Toxic to soil organisms. R57: Toxic to bees. R58: May cause long-term adverse effects in the environment. R59: Dangerous for the ozone layer.</p>	
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Sample form of the list of hazardous substance or mixture (preparation) safety data sheets which an employee must get familiar with

PUBLIC COMPANY ORLEN LIETUVA

APPROVED BY:
(position of organizational unit manager)
(signature)
(name, surname)
 _____, 201__

 (organizational unit)

 (position)

List of Hazardous Substance and Mixture (Preparation) Safety Data Sheets which an Employee must get Familiar with No. ___








Item No.	Hazardous chemical substance and mixture (preparation)	SDS last revision date

AGREED WITH:

Occupational Health and Safety Specialist
 List prepared by:

Warning Signs.

WARNING SIGNS

SYMBOL	DESCRIPTION
	Warning explosive substances and mixtures
	Warning oxidizing substances and mixtures
	Warning flammable substances and mixtures
	Warning Very toxic, toxic, carcinogenic, mutagenic, toxic for reproduction substances and mixtures
	Warning harmful, irritant, sensitizing substances and mixtures
	Warning corrosive substances and mixtures
	Warning general caution


Note: The background of warning signs must be yellow or yellowish orange.

A label must include:

- a) name of the chemical substance or mixture,
- b) hazard pictograms,
- c) signal words,
- d) hazard statements,
- e) precautionary statements.

Example of label

EMULSIFIED VACUUM RESIDUE



Signal word: *Danger.*

Hazard pictograms: *GHS07 GHS08 GHS09*

Hazard statements:

H332: Harmful if inhaled.

H350: May cause cancer.

H361: Suspected of damaging fertility or the unborn child.

H373: May cause damage to organs.

H410: Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P201: Obtain special instructions before use.

P260: Do not breathe dust/fume/gas/mist/vapors/spray.

P273: Avoid release to the environment.

P281: Use personal protective equipment as required.

P308+P313: If exposed or concerned: Get medical advice/attention.

P501: Dispose of contents/container to ...