

PUBLIC COMPANY ORLEN LIETUVA

APPROVED BY:
Director of Quality, Labor Safety
and Environmental Control
5 December 2022
Order No TV1(1.2-1)-2022-0616

OCCUPATIONAL HEALTH AND SAFETY PROCEDURE BDS-17 WAREHOUSING AND USE OF HAZARDOUS SUBSTANCES AND MIXTURES

I. GENERAL PROVISIONS

Purpose and Scope of Application

1. Occupational Health and Safety Procedure BDS-17 'Warehousing and Use of Hazardous Substances and Mixtures' (hereinafter – the Procedure) aims to establish the requirements for warehousing, temporary storage and use of hazardous substances and mixtures.
2. Requirements established herein shall be observed by all employees of Public Company ORLEN Lietuva (hereinafter – the Company) and contractors (under relevant contracts concluded with the Company) involved in the warehousing and use of hazardous substances and mixtures in the territory of the Company.
3. Requirements established herein shall not apply to:
 - 3.1. Wastes;
 - 3.2. Radioactive materials;
 - 3.3. Crude oil and petroleum products in process units or process vessels (e.g., pipelines, storage tanks, towers, etc.);
 - 3.4. Transportation of hazardous substances and mixtures by road or railway.

II. REFERENCES

4. This Procedure has been developed with regard to effective revisions of the following legal regulations and other documents:
 - 4.1. Law of the Republic of Lithuania on Chemical Substances and Chemical Mixtures;
 - 4.2. Law of the Republic of Lithuania on Safety and Health at Work;
 - 4.3. General Fire Safety Regulations approved by the Director of Fire Prevention and Rescue Department under the Ministry of the Interior;
 - 4.4. Regulations on Protection of Workers from Exposure to Chemical Substances at Work approved by the Minister of Social Security and Labor and Minister of Health of the Republic of Lithuania;
 - 4.5. Regulation (EC) No1907/2006 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 (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 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH);

4.8. Commission Regulation (EU) No 2020/878 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), Annex II;

4.9. LST EN 15154–5 Emergency safety showers - Part 5. Water overhead body showers for sites other than laboratories;

4.10. Technical Standard ST P1 T1 - Organization and marking of chemicals storage areas.

4.11. Employee Indoctrination Procedure of the Company.

III. TERMS, DEFINITIONS AND ABBREVIATIONS

5. Terms used herein are defined as follows:

Substance – a chemical element and its compounds in the natural state or obtained by any manufacturing process, 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.

Mixture – a mixture or solution composed of two or more substances.

Label – a paper or plastic of specific size and shape attached to a packaging (container) containing information on substance or mixture.

Use of hazardous substances or mixtures – any operation related to storing, keeping, filling into containers, transfer from one container to another, mixing or any other utilization of substances and mixtures.

Hazardous substances and mixtures (HSM) – substances and mixtures assigned to one or several hazard classes and categories defined in Regulation (EC) No 1272/2008 (see Annex 1 hereto).

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 damage (see Annex 1 hereto).

Hazard statement – 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.

Precautionary statement – a phrase that describes safety precautions intended to minimize or avoid the negative effects arising from the handling or disposal of hazardous substance or mixture.

Warehousing – HSM keeping, storing in buildings, premises, sites intended for this purpose.

Temporary storage place – place within the territory of process unit or other production/warehousing area where HSM intended for production are accumulated and temporarily stored until further transportation to the places of permanent storage (warehousing).

Safety data sheet – document containing detailed information on hazardous substance or mixture as regards the protection of human health, occupational safety and the environment against exposures.

SDS base – special folder in the Company's computer network at *K:/Saugos duomenu lapai* where up-to-date revisions of SDS are uploaded and kept.

UFI code – unique formula identifier which is a 16-character alphanumeric code that is required in information provided on mixtures of hazardous substances and on labels of such mixtures. Example of UFI code: UFI: VDU1-414F-1003-1862.

ITEM number – nomenclature code in ORACLE computer program used for identification of purchased substances and mixtures.

IV. DUTIES AND RESPONSIBILITIES OF EMPLOYEES

6. Employees using HSM and/or performing HSM warehousing works shall:

- 6.1. Prior to commencement of work, read and follow instructions provided in SDS of HSM to be used and/or warehoused;
- 6.2. During work with HSM, use personal protective equipment specified in respective SDS;
- 6.3. Discontinue work and immediately notify immediate superior in the following cases:
- 6.3.1. Work area contamination (leakage, spill, gas release, etc.) with HSM;
- 6.3.2. Illegible labels on HSM packages (containers) or in a language other than Lithuanian.

7. Managers of organizational units shall:

- 7.1. Develop the lists of HSM safety data sheets (hereinafter – the Lists) (see Annex 2) for each job position using or warehousing hazardous substances or mixtures and familiarize employees with such lists as well as revise and update these Lists at least every 12 months;
- 7.2. Agree these Lists with the designated employee appointed by the decree of the Director of Technology;
- 7.3. Familiarize relevant employees with the HSM safety data sheets before the commencement of the work and periodically thereafter (at least every 12 (twelve) months);
- 7.4. Before starting to use a new HSM, familiarize relevant employee with the safety data sheet of the new HSM;
- 7.5. Familiarize relevant employees with the new SDS and SDS indicated in the List by making appropriate entries in the list of employees having passed additional occupational health and safety indoctrination, in accordance with Article 36 of Employee Indoctrination Procedure or any other procedure for employee familiarization with documents applicable in the particular organizational unit;
- 7.6. If a new SDL version is available or if SDL is not in the database, inform the Technology Department thereof by email: SDL.Chemines.medziagos@orlenlietuva.lt;
- 7.7. Upon receipt of a new SDS version for used HSM, check whether there are any substantial changes regarding the safe use of HSM. In case of substantial changes, provide additional indoctrination to relevant employees;
- 7.8. Ensure that the SDS database is accessible to employees or ensure that up-to-date versions of the SDS are available in the workplace;
- 7.9. Provide the employees with appropriate personal protective equipment and equipment suitable for working with HSM as well as establish the procedure for maintenance of such equipment to ensure compliance with the occupational health and safety requirements;
- 7.10. Minimize the working time of employees who are or may be exposed to HSM;
- 7.11. Accept HSM in the organizational unit only if they are properly packaged, labeled (in the Lithuanian language) and have safety data sheets that comply with the requirements of Section 8 of this Procedure.

8. Technology Department shall:

- 8.1. Check SDS and place it in the SDS database before starting to use HSM;
- 8.2. For new HSM batches received, check whether their SDS match the version available in the SDS database and update it in case of discrepancies.

V. REQUIREMENTS FOR WAREHOUSING SITES

9. HSM shall be warehoused only in buildings, premises and/or sites designed, constructed and equipped for that purpose.
10. Warehousing facilities shall be arranged in such a way as to prevent access by persons not related to HSM warehoused. Health and safety sign 'Authorized personnel only' shall be displayed at the entrance points.

11. Warehousing facilities shall be equipped with collective protective equipment (e.g. eyewash, emergency shower, etc.) specified in the safety data sheets for HSM stored.

12. Depending on the characteristics of HSM stored, warehousing areas shall be marked with an appropriate warning sign (see Annex 3).

13. It is prohibited to obstruct windows, doors, aisles and gates in the warehousing facilities.

14. It is prohibited to leave electric forklifts, motor vehicles and charge their batteries in the warehousing facilities.

VI. REQUIREMENTS FOR TEMPORARY STORAGE SITES

15. Temporary storage sites shall be installed on paved and impermeable surfaces.

16. Where technically possible, the temporary storage sites shall be equipped with gutters for possible leakage of substances into the industrial wastewater system.

17. Each temporary storage site shall provide easy access to any container.

18. Each temporary storage site shall provide free access to firefighting equipment.

19. If HSM are handled in temporary storage sites, the workplaces must have the necessary safety equipment/materials for safe disposal of HSM spilled (e.g. sorbent, containers for fresh and contaminated sorbent, brush, shovel etc.).

20. Temporary storage sites shall comply with the requirements relating to HSM labelling, storage, handling and emergency procedures specified in the relevant sections hereof.

VII. HSM WAREHOUSING REQUIREMENTS

21. HSM shall be kept in groups according to their extinguishing media (water, foam, etc.) and in accordance with the information given in the respective safety data sheets.

22. HMS reactive with water shall be kept in a separate storage room in airtight containers at least 15 cm above the floor.

23. Packed HMS (in drums, bags, etc.) shall be kept on shelves or in stacks. When stacked, packages shall be placed on wooden or other pallets.

24. When placing HMS on shelves or in stacks, the signs indicating the top of the packages shall be followed. Packages shall be stacked in a way so that the side with the label and hazard symbol faces the aisle.

25. In warehouses with a floor area less than 200 m², the aisles between shelves and stacks, the spaces between them and the most projecting structures of the walls shall be at least 0.8 m wide and not obstructed.

26. Warehouses with a floor area greater than 200 m²:

26.1. Aisles shall not be narrower than 1.2 m between shelves and stacks, and not narrower than 0.8 m between the most projecting wall structures and stacks;

26.2. Warehousing areas for off-shelf HSM shall be marked with floor marking tapes.

27. The pre-packing, dispensing and degassing of HMS in the general-purpose warehousing facilities shall be prohibited.

28. HMS shall be warehoused in the original packaging provided by the manufacturer.

29. It shall be prohibited to keep empty containers in the same room in the warehousing facilities where flammable substances and mixtures are stored.

30. Warehousing facilities for corrosive substances and mixtures shall contain a sufficient amount of neutralizing agents.

VIII. SAFETY DATA SHEETS

31. Only SDS in the Lithuanian language shall be used.

32. SDS must comply with the requirements of Regulation (EC) No 1907/2006 (as amended) referred to in Article 4.5 of this Procedure.

IX. REQUIREMENTS FOR USE OF HSM

33. Only HSM with packaging labeled in Lithuanian shall be used in the workplace.

34. If, in the course of the work, it is necessary to place HSM in packaging other than the original packaging of the manufacturer, the new packaging (container) shall be selected in accordance with the information given in the safety data sheet for that HSM, and shall be appropriately labeled in accordance with the information provided in Annex 4.

35. Pouring, dosing and other transfer operations shall be carried out using manual or mechanical transfer equipment (e.g. pumps, etc.) designed for this purpose.

36. For all HSM transfer operations, collection trays shall be placed in all potential spillage places.

37. The use of defective equipment shall be prohibited for pouring, dosing and other HSM transfer operations.

38. Premises, where HSM are used, shall be equipped with ventilation that ensures sufficient air circulation necessary to keep concentrations of chemical substances in the ambient air below the limit values;

39. In workplaces, where corrosive substances and mixtures are used, an emergency shower and eyewash station (hereafter - emergency washing equipment) shall be provided at a distance of not more than 20 meters. If no stationary emergency washing equipment is available within the given distance, portable emergency washing equipment shall be used. Prior to starting any work, the operation of the emergency washing equipment shall be verified (if it functions properly, is accessible, etc.).

40. Workplaces and other areas not designed for the warehousing of HSM shall be permitted to store no more than the amount of HSM used per shift.

41. Household cleaning/disinfecting products shall be used in accordance with the requirements provided on the labels on their packagings.

42. In laboratories, HSM (e.g. reagents) shall be used in accordance with technical and methodological documentation (e.g. ASTM, LST, EN, ISO, GOST, TS).

43. Before returning the packaging of used HSM (drums, containers, etc.) to the Company's Central Warehouse, the managers of the Company's organizational units shall arrange for:

43.1. Cleaning (washing, steaming) of such packaging;

43.2. Removal of all labels from the packaging.

44. Before delivering the spent catalyst or other HSM to the Company's Central Warehouse of the Company, the manager of the organizational units shall:

44.1. Agree on the terms of delivery of catalyst or other hazardous substances with the Head of Company's Central Warehouse;

44.2. Present the respective SDL to the Head of the Company's Central Warehouse;

44.3. Mark the packings in accordance with the information provided in Annex 4 and attach the 'SPENT' label.

45. Spent HSM shall be disposed of in accordance with the effective Company Waste Management Rules.

X. EMERGENCY PROCEDURES

46. Incidents and accidents during the warehousing or use of chemicals shall be reported to:

46.1. Refinery – Dispatcher of Production Control Department, tel. 3333 (for fixed line calls) or 8 443 92510 (from any communication line);

46.2. Būtingė Terminal – Shift Supervisor of the Terminal Operations Group, tel. 8 443 93459 or 8 686 78112;

46.3. Biržai and Joniškis Oil Transshipment Stations - Main Pipelines Service Group Manager, tel. 8 443 93483 or 8 689 89845;

46.4. Immediate superior.

47. The neutralization, collection or other handling of HSM shall be based on the information provided in the SDS.

48. Collected, neutralized, obsolete, unidentified HSM, contaminated packagings, etc., shall be separated from other HSM and handled in accordance with the applicable requirements of the Company's Waste Management Rules.

XI. FINAL PROVISIONS

49. Responsibility for periodic review and updating of this Procedure, if needed, shall lie with Director of Quality, Labour Safety and Environmental Control of the Company.

XII. ANNEXES

Annex 1. HSM hazard categories and hazard pictograms.

Annex 2. Sample form of the List of HSM Safety Data Sheets to be Mandatory Familiarized with.

Annex 3. Warning signs.

Annex 4. Sample label.

Prepared by
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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 categories 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 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 – a gas or gas mixture having a flammable range with air at 20°C and a standard pressure of 101.3 kPa.

Oxidizing gas – any gas which may, generally by providing oxygen, cause or contribute to the combustion of other material.

Gases under pressure – gases which are contained in a receptacle at a pressure of 200 kPa or higher and which are liquefied or liquefied and refrigerated. Such include 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 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 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 behavior may present a danger to the structure and/or the functioning of the stratospheric ozone layer.

Sample form of the List of HMS Safety Data Sheets to be Mandatory Familiarized with

PUBLIC COMPANY ORLEN LIETUVA

APPROVED BY:

(Job position)(Full name)(Signature)

_____ 202__

(ORGANIZATIONAL UNIT)(Job position)**Sample Form of the List of HMS Safety Data Sheets to be Mandatory Familiarized with**

_____ 202__ , No ____

Item No	ITEM number	Hazardous substance or mixture	Date of latest revision of the Safety Data Sheet

List prepared by:

(Job position)

(Full name)

(Signature)





AGREED WITH:

(Job position)

(Full name)

(Signature)

WARNING SIGNS

SIGN	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 the warning signs must be yellow or yellowish orange.

Labels shall include:

- a) Name of the chemical substance or mixture;
- b) UFI code (for labelling a hazardous mixture);
- c) Supplier information;
- d) Hazard pictograms;
- e) Signal words;
- f) Hazard statements;
- g) Precautionary statements;

Sample label

TOLAD 9719
UFI: TGT9-A1JS-S00G-RKTA

MANUFACTURER
BAKER HUGHES
LIVERPOOL
TEL.: 123123112



Hazard pictograms: GHS07

Signal word: Caution!

Hazard statements:

Irritant to skin.

May cause an allergic skin reaction.

Harmful if inhaled.

Precautionary statements:

Wear protective gloves. Wear eye or face protection. Avoid release to the environment.

If in eye: rinse with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

If on skin: wash with plenty of water. If skin irritation or rash occurs: get medical advice/attention.