# Environmental Management System 8.1.5 Chemical Waste Store User Procedure

Updated: November 2025

| | |
|---|---|
| **Author:** | Ben Harris (Environment Officer) |
| **Approved by:** | Teifion Maddocks (Sustainability Manager) |
| **Clause Ref:** | Ecocampus and ISO 14001 (2015) |
| **DO NOT PRINT THIS PROCEDURE UNLESS NECESSARY** | |

# 1 Purpose

To define Swansea University's legal obligations and procedures associated with the storage, collection and disposal of used chemicals, solvents and other hazardous chemical substances. This procedure applies to waste chemicals, solvents and other hazardous chemical substances generated by the University.

# 2 Responsibilities

| | |
|---|---|
| All relevant staff | Ensure all hazardous chemical waste is packaged, labelled, transported and disposed of correctly as per the steps in this procedure. |
| Sustainability Team | Provide support to ensure that all departments take waste chemicals, solvents and other hazardous substances to the relevant chemical waste store.<br>Arrange the subsequent packing and disposal of the chemicals and ensure legal compliance and compliance with this procedure.<br>Additional responsibilities include:<br>• Carrying out Duty of Care checks.<br>• Notification and registration to the relevant authorities.<br>• Provides the appropriate EWC for disposal (where applicable) |
| Chemcycle & Waste care | Provide a competent chemist to pack chemicals, and following this, the collection and transportation of chemical waste for disposal.<br>Ensure consignment notes are completed, signed and sent to the Sustainability Team. |
| Mitie (main waste contractor) | Provide a competent chemist to pack chemicals, and following this, the collection and transportation of chemical waste for disposal.<br>Ensure consignment notes are completed, signed and sent to Sustainability Team. |

# 3 Legal Duty of Care and Responsibility

To ensure the that the University complies with its Duty of Care, as set out in Section 34 of the Environment Protection Act 1990 part II, the University must ensure that all waste is stored in such a way as to prevent escape or leakage whilst on site or in storage.

- Waste is only kept, treated, deposited or disposed of in accordance with a waste management licence or other authorisation.

- Waste does not escape from the control of the holder or cause environmental pollution or harm.
- Waste is only transferred to authorised persons such as registered waste carriers or licensed disposal operations permitted to accept that type of waste.
- All transfers / movements of the waste are accompanied by an adequate written description of the waste which will allow waste to be identified and subsequently handled correctly.

The University must act to keep stored waste safe against:

- corrosion or wear of waste containers.
- accidental spilling, leaking or inadvertent leaching from waste unprotected from rainfall.
- accident or weather breaking contained waste open and allowing it to escape.
- waste blowing away or falling while stored or transported.
- scavenging of waste by vandals, thieves, children, trespassers or animals.

This Duty of Care begins with the person/s who produced the waste, and it cannot be delegated to others. This duty is legally enforceable, and breaches can lead to criminal prosecution of individuals and the University. As a result, the University (its staff and students) must make every effort to categorise, segregate and contain waste according to standards imposed by current legislation.

Prior to collection, chemical wastes must be segregated and stored in accordance with compatibility in the University's Chemical stores in order to minimise risk and to prevent chemical reactions. Further guidance on chemical waste classification and storage is provided by WMGN20 Chemical Waste Classification and Storage Guidance and the UK Government's "Technical Guidance WM3: Waste Classification - Guidance on the classification and assessment of waste".

# 4 Process

## 4.1 Key Activities

Sustainability team:

- Appointing and managing the licensed Waste Disposal Contractor(s).
- Co-ordinating the collection and subsequent disposal of chemical waste.
- Managing chemical waste documentation.
- Responsible for the approvals process for the disposal of chemical waste to the Chemical Waste Stores, and opening of the stores at the times below:
    - **Bay Campus (Service yard): Every Wednesday, 11am**
    - **Singleton Campus (Grove): Every Thursday, 10am**

Faculties:

- Must ensure they have a system in place for **Chemical Risk Assessment**[1] of hazardous substances and that assessments identify the correct means of disposal.
- Must ensure that chemicals are stored in suitable containers and are correctly labelled for collection.
- Must ensure that the anticipated volume of chemical waste generated can be safely stored until the scheduled disposal day.
- Take chemical waste to the appropriate chemical waste store for disposal (NB except high-risk chemicals – covered in 4.2.5)
- Must send correctly completed chemical waste disposal request forms to estates-waste@swansea.ac.uk (see "Section Chemical Waste Approvals" and have had approval granted prior to taking chemical waste to the storage area.

## 4.2 Disposal Instructions

A step-by-step guide is provided below on the procedure to dispose of chemical waste via the University's Chemical Waste Store;

1. Identify each waste item's primary Hazardous Property
2. Correctly complete the Chemical Waste Disposal Form
3. Email form to estates-waste@swansea.ac.uk for assessment and approval
4. Once approved, ensure waste is securely, packaged and labelled
5. Transportation of waste to store in appropriate containment **with a paper copy of the complete Chemical Waste Disposal Form.**
   - For Bay Campus – bring out to the service yard store wearing PPE.
   - For Singleton Campus – bring out to the Grove waste store wearing PPE.
   - **The wearing of PPE is MANDATORY when bringing waste for disposal**

The University's appointed chemical waste contractor's chemist will identify and apply the correct European Waste Code (EWC) to the wastes prior the removal of the waste from site.

### 4.2.1 Step 1 - Identify the waste item's primary Hazardous Property

Information is provided in WMGN20. Further guidance on hazardous waste classification and threshold limits for the different hazard classifications can be found within Appendix 2, and Technical Guidance WM3: Waste Classification and the University's WMGN20 Chemical Waste Classification and Storage Guidance. For further support please contact estates-waste@swansea.ac.uk

[1] See local Health & Safety Lead for further information

### 4.2.2 Step 2 – Completion of the Chemical Waste Form

Any chemical waste that needs to be disposed of must be itemised on the **Chemical Waste Disposal Form**[2], with links to the REACH-compliant Safety Data Sheets (SDS) for each chemical.

### 4.2.3 Step 3 - Email form for assessment and approval

The completed waste disposal form should be emailed to estates-waste@swansea.ac.uk for assessment and approval by the Sustainability team. There are mandatory fields highlighted on the form, failure to accurately complete these fields will lead to delays in gaining approval for disposal. The Sustainability team may request further information and will review each form to ensure all chemical wastes listed are compatible to be accepted into the store.

**Once approved, the team will give you a time to attend the store.**

### 4.2.4 Step 4 - Ensure waste is labelled and, securely and appropriately packaged

**All** wastes brought to the store **must** be clearly labelled with the Hazardous Property (HP) identified.

**No items will be accepted into the store without a completed University Chemical Waste Label**[3]

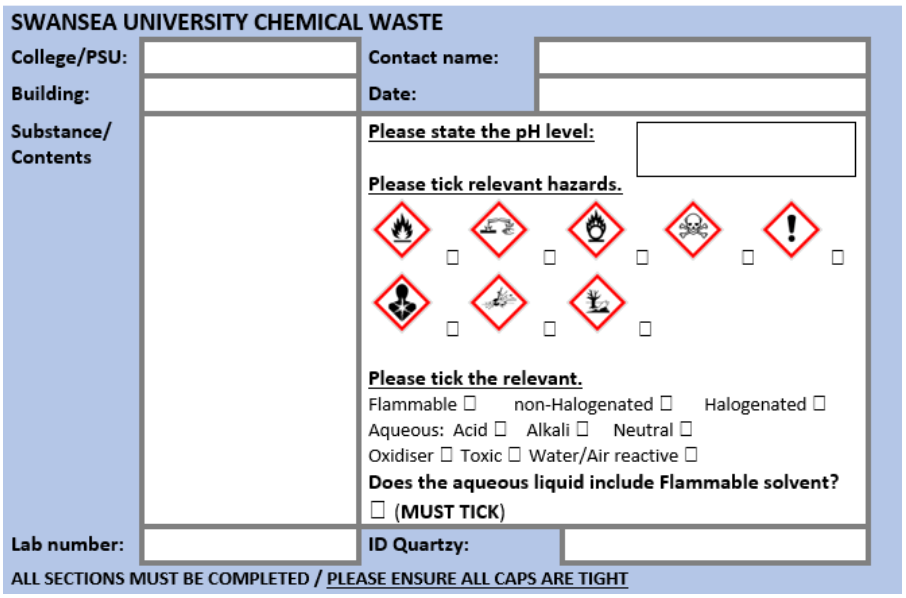


*Figure 1. Example of the Chemical Waste Label.*

[2] Found at the staff pages from https://www.swansea.ac.uk/sustainability/sustainability-minimal-waste/

[3] Found at https://www.swansea.ac.uk/sustainability/sustainability-minimal-waste/

## Labelling: Trade names / Unknowns

### Trade names:

When disposing of a chemical/substance that has a trade name, please ensure that you list its full chemical identity rather than only the trade name on the Chemical Waste Disposal Form and Chemical Waste Label. Forms containing only a trade name will be rejected by the chemical waste contractor.

You must include what the chemical contains. This can be found in **Section 3: Composition/information on ingredients** of the corresponding chemical Safety Data Sheet (SDS).

**For example:**

**TICKOPUR TR 13** is a trade name for a cleaning agent, but the name alone provides no information as to the chemical makeup of the product.

Using Section 3 of the TICKOPUR TR 13 SDS provides the following information on its constituent ingredients:

**Hazardous components**

| CAS No | Chemical name | | | Quantity |
|---|---|---|---|---|
| | EC No | Index No | REACH No | |
| | Classification (Regulation (EC) No 1272/2008) | | | |
| 7732-18-5 | Water | | | 70-80 % |
| | 231-791-2 | | | |
| | | | | |
| 527-07-1 | Sodium gluconate | | | <5,0 % |
| | 208-407-7 | | *1 | |
| | | | | |
| 1310-73-2 | Sodium hydroxide; caustic soda | | | <5,0 % |
| | 215-185-5 | 011-002-00-6 | 01-2119457892-27 | |
| | Skin Corr. 1A; H314 | | | |
| 100085-64-1 | Cocobetainamido Amphopropionate | | | <5,0 % |
| | 309-206-8 | | * | |
| | Skin Irrit. 2, Eye Irrit. 2, Aquatic Acute 1; H315 H319 H400 | | | |
| 112-34-5 | 2-(2-butoxyethoxy)ethanol, diethylene glycol monobutyl ether | | | <5,0 % |
| | 203-961-6 | | 01-2119475104-44 | |
| | Eye Irrit. 2; H319 | | | |
| 111798-26-6 | Phosphoric acid ester, sodium-salt | | | <2,0 % |
| | - | | * | |
| | Skin Irrit. 2, Eye Dam. 1; H315 H318 | | | |
| 51981-21-6 | N,N-bis(carboxylatomethyl)-L-glutamate, Sodium salt | | | <1,0 % |
| | 257-573-7 | | 01-2119493601-38 | |
| | Met. Corr. 1; H290 | | | |

This highlighted components above is the information that needs to be detailed on the disposal form and label.

### Unknown chemicals/substances:

Occasionally you may encounter a bottle of liquid/solid with no label or any identifying information. In these instances, if you are disposing of a chemical waste that is unknown, you must make every reasonable effort to provide as much information as possible about the nature of the chemical.

It is **not acceptable** to simply label the waste as ‘Unknown’ or ‘Mixed Powders’ for example.

Basic tests such as pH, specific gravity, appearance, colour, does it fume (under extraction) etc. can yield valuable information that can assist in categorising the substance.

For example, an unknown liquid that is colourless in appearance, fumes when opened and has a pH 2.0, you might then describe the substance as:

‘**Unknown, but likely to be aqueous inorganic acid (e.g. HCl, HNO3) based on substance characteristics.’**.

### Chemical Waste Containers

Chemical waste should only be stored in appropriate containers which must be clearly labelled and suitable for the type of waste contained

Containers must be suitable for the type of waste; therefore, the following guidelines should be followed:

- **Glass Winchesters**: used for most chemicals, but not hydrofluoric acid waste.
- **Plastic Winchesters**: suitable for acids and alkalis. However, do not use for aggressive solvents, or mixtures containing aggressive solvents.
- **Containers/bottles designed for solids** must not be used for liquids wastes.
- To mitigate the risk of over pressurisation, vented caps must be utilised to allow safe pressure release.
- Bottle/container caps are not overtightened.

Where a container (e.g. Winchester) is used for waste that previously held another chemical, the following must be adhered to:

- The container is vented and cleaned ensuring it does not contain any residue that could react with the waste.
- The previous contents label is either:
  - Fully removed, or
  - Fully defaced
- Checked that it is physically sound with no cracks, chips or punctures.
- The container is liquid tight with a suitable cap/lid

All waste containers must be clearly labelled as ‘**waste**’ and detail the contents of the container (e.g. halogenated waste) and have the appropriate GHS hazard symbols attached.

It is the responsibility of the waste producer to check the condition of all Winchesters and containers prior to disposal. Colleges/PSUs/Research

groups are required to source their own waste bottles or Winchesters for waste disposal. Email estates-waste@swansea.ac.uk for details

**Waste containers (glass or plastic) must not be overfilled.** They should never be filled more than 3/4 full. Failure to adhere to these requirements will result in the Waste containers not being accepted at the store.

Guidance with respect to suitable containment and packaging is outlined within individual chemical SDS.

*Figure 2. Maximum fill height of a waste container and the consequences of overfilling and incorrect use of glass Winchesters.*

**All full waste containers must be stored and segregated correctly in-situ according to their hazards up until the point they are to be brought to the hazardous waste store for disposal**

### Chemically Contaminated Solid Waste Red Bags

All red bags should contain chemically contaminated solids such as PPE and blue paper towels, filter papers etc. No sharps or other items[4] likely to compromise the integrity of the bag should be placed into the red bag. Bags must be integrally sound, with no rips, when brought to the store. If necessary, double bag the waste to prevent materials escaping. **Each bag must have a completed Chemical Waste Label**. See **WMGN21 Chemically Contaminated Laboratory Solids** for further guidance**.**

### Solid waste (other than red bag)

All solid chemical waste e.g. powders, products etc. must be appropriately, and securely packaged in accordance with their SDS and user guidelines. This is to ensure safe transportation to the chemical waste store, and safe transport for disposal.

[4] See WMGN22 and WMGN23

### 4.2.5 Step 5 – Transfer to the Chemical Waste Store

**Any chemicals with the following primary Hazardous Property must be directly collected from laboratories;**

- **HP-1 (Explosive) e.g. Picric Acid**
- **HP-6 (Toxic, in particular toxic on inhalation) e.g. Hydrofluoric Acid**

However, each consignment will be reviewed by the Sustainability Team on a case-by-case basis dependent on concentration.

There are two chemical waste stores located on University premises, the locations of which are shown in Appendix 1.

- The **Singleton Campus Grove Chemical Waste Store** is located between Grove (Building 12) and Glyndwr (Building 11.1). **The Store is opened by the Sustainability Team every Thursday 10-10.30am for those with approval to dispose of waste.**
  Contractors utilising the stores (without Sustainability accompaniment) will need to undertake the Chemical Store induction prior to use.
- The **Bay Campus Chemical Waste Store** is located in the Engineering Service Yard. **The Store is opened by the Sustainability Team every Wednesday 11am until 11.30am for those with approval to dispose of waste.**

Users can only bring waste to the stores if they had received confirmation and a timeslot from the Sustainability Team.

#### Chemical waste transport requirements:
#### PPE

Individuals bringing waste to the Singleton and Bay Chemical Waste Stores **must** wear appropriate PPE including a lab coat, gloves, closed shoes.

**This is a mandatory requirement, and entry will be refused if user is not adhering to PPE requirements**

#### Transportation

**All waste items must be transported in a safe and secure manner, in a Winchester carrier, or bunded trolley.**

If you do not have access to a Winchester carrier, or bunded trolley one can be booked out from the Chemicals Waste Store on each campus when requesting a disposal slot.

*Figure 3: Grove bunded trolley / Bay bunded trolley*

A paper copy of the Chemical Waste Disposal Form must be brought with the consignment.

## Processing & Collection of Wastes for Offsite Disposal

The University chemical waste is collected by a registered hazardous waste contractor, who hold all necessary permits and licences with both Natural Resources Wales (NRW) and the Environment Agency (EA).

The University waste is taken to a registered hazardous waste transfer station before transportation to specialised facilities, which neutralise, incinerate, or prepare the chemical waste for reuse in industry.

## 5 Disposal Cost

Charges apply for the disposal of chemical waste to University tenants. Tenants who wish to dispose of chemical waste must fill out the **Chemical Waste Disposal Form** and email **estates-waste@swansea.ac.uk** to discuss arrangements and indicative costs.

Colleges and PSUs requiring the mass disposal (i.e. laboratory clear-out) of chemicals, including direct collect for high volumes of HP1 and HP6 chemicals, will be required to supply a cost code for services.

For further guidance please contact **Estates-Waste@Swansea.ac.uk**

## 6 Effects and Actions on Non-Conformance

Failure to comply with this procedure may result in:

- Non-conformance with the requirements of EcoCampus and the ISO 14001:2015 standard.

Departure from this procedure is addressed in the procedure **10.1 Nonconformity and Corrective Action**

# 7 Version Control

| Date | Version | Update |
|---|---|---|
| XX/XX/XX | 1 | Original document |
| XX/XX/XX | 2 | - Updated template<br>- Reviewed, updated and expanded information |
| 26.01.2021 | 3 | - Various hyperlink updates and insert to changes in store opening times |
| 04.08.2023 | 4 | - Veolia is no longer the primary contractor, Mitie is now the service provider<br>- Opening times updated<br>- Further detail added regarding transportation, creation of 4.2.6 |
| 14/05/2025 | 5 | - Review date removed- procedures will now only be updated in the case of changing activity or legislation.<br>- Changes of references from Waste and Recycling Officer to Sustainability team<br>- Updated opening days of the chemical waste stores due to changing personnel<br>- Minor changes to formatting and wording.<br>- Appendix 2 removed<br>- Appendix added for hazardous property identification |
| 17/11/2025 | 6 | - Mandatory PPE requirements emphasised when bringing waste to stores.<br>- Labelling clarifications and examples for trade named products and unknown chemicals.<br>- Further guidance on chemical waste containers, in particular use of old chemical containers for waste.<br>- Vented cap requirements for liquid wastes included.<br>- Minor changes to formatting and wording. |

# Appendix 1 - Chemical Waste Store Location Maps

Singleton Campus Grove Chemical Waste Store is located between Grove (Building 12) and Glyndwr (Building 11.1)


## BUILDINGS

| | | | | | |
|---|---|---|---|---|---|
| Finance Building | 1 | Margam Building | 9.4 | Digital Technium | 24 |
| Singleton Abbey & Stableblock | 2 | Botanic Compound | 10 | Taliesin Arts Centre & Egyptology Centre | 32 |
| Keir Hardie Building | 3 | Glyndŵr Building | 11.1 | Institute of Life Science 1 | 33 |
| James Callaghan Building | 4 | Vivian Tower | 11.2 | Llŷr Building | 34 |
| 1937 Library | 5 | Data Science Building | 11.4 | Institute of Life Science 2 Centre for NanoHealth | 36 |
| Mosque | 6 | Grove Building | 12 | ORACLE | 43 |
| Library | 7 | Richard Price Building | 14 | | |
| Faraday Building | 8.1 | Amy Dillwyn Building | 15 | | |
| Faraday Tower | 8.2 | Haldane Building | 16 | | |
| Talbot Building | 8.3 | Fulton House | 17 | | |
| Wallace Building | 9 | Union House | 18 | | |

Buildings

Student Residences

## SERVICES AND FACILITIES

- Visitors Car Park (Pay to Park)
- Staff Car Parks
- Accessible Parking
- Bus Stops
- Santander Cycles
- Taxis
- Cycle Park
- Food & Drink
- Baby Changing Facilities
- Students' Union
- Nursery
- Defibrillator
- The Lighthouse (Chaplaincy Centre)
- Shower
- Super
- The Sl & Cor
- ATM
- Dentis
- Occu
- Docto

Bay campus Chemical Waste Store in the Engineering Service Yard, on the north side of Engineering East (building 3)


**BUILDINGS**

| | |
|---|---|
| Energy Safety Research Institute (ESRI) | 1 |
| ORACLE II | 1.1 |
| Active Classroom | 1.2 |
| Active Office | 1.3 |
| Centre for Integrative Semiconductor Materials (CISM) | 1.4 |
| Institute of Structural Materials (ISM) | 2 |
| Engineering East | 3 |
| Engineering Central | 4 |
| Bay Library | 5 |
| Great Hall | 6 |
| School of Management | 7 |
| Y Twyni | 7.1 |
| The College | 7.2 |
| Rod Jones Hall | 8.19 |
| Tower Information Centre (TIC) | 9 |
| Computational Foundry | 11 |
| Engineering North | 12 |

Buildings  Student Residences

**SERVICES AND FACILITIES**

- Visitors Car Park (Pay to Park)
- Staff Car Park
- Accessible Parking
- Bus Stops
- Santander Cycles
- Taxis
- Cycle Park
- Food & Drink
- ATM
- Showers
- Supermarket
- Defibrillator
- Sports Reception/Gym
- Baby Changing Facilities
- The Haven (Chaplaincy Centre)
- Launderette
- Students' Union
- TIC Entrance
- Outdoor Mu Use Games
- Outdoor Gy
- Site of Spec Scientific Int
- Site of Spec Interest Park
- UPP Recepti (Accommod
- MyUr

## Appendix 2. Hazardous property identification

| Pictogram | Physical hazard classes | Hazard properties |
|---|---|---|
|  | Unstable explosives | HP1 Explosive |
| | Explosives, divisions 1.1, 1.2, 1.3, 1.4 | |
| | Self-reactive substances and mixtures, types A, B | |
| | Organic peroxides, types A, B | |
|  | Oxidizing gases, category 1 | HP 2 Oxidising |
| | Oxidizing liquids, categories 1, 2, 3 | |
| | Oxidizing solids, categories 1, 2 | |
|  | Flammable gases, category 1 | HP 3 Flammable |
| | Flammable aerosols, categories 1, 2 | |
| | Flammable liquids, categories 1, 2, 3 | |
| | Flammable solids, categories 1, 2 | |
| | Self-reactive substances and mixtures, types B, C, D, E, F | |
| | Pyrophoric liquids, category 1 | |
| | Pyrophoric solids, category 1 | |
| | Self-heating substances and mixtures, categories 1, 2 | |
| | Substances and mixtures, which in contact with water, emit flammable gases, categories 1, 2, 3 | |
| | Organic peroxides, types B, C, D, E, F | |

| Pictogram | Physical hazard classes | Hazard properties |
|---|---|---|
| No pictogram | Explosive, division 1.5 | HP 15 |
| | Explosive, division 1.6 | Not applicable |
| | Flammable gas, category 2 | HP 3 Flammable |
| | Self-reactive substances and mixtures, type G | Not applicable |
| | Organic peroxides, type G | Not applicable |
|  | Compressed gases | No hazardous property |
| | Liquefied gases | |
| | Refrigerated liquefied gases | |
| | Dissolved gases | |
|  | Skin corrosion, category 1A | HP 4 Irritant<br>HP 8 Corrosive |
| | Skin corrosion, categories 1B and 1C | HP 8 Corrosive |
| | Serious eye damage, category 1 | HP 4 Irritant |
| | Corrosive to metals | Not applicable |
|  | Acute toxicity (oral, dermal, inhalation), categories 1, 2, 3 | HP 6 Acute Toxicity |
| | Respiratory sensitization, category 1 | HP 13 Sensitising |
| | Germ cell mutagenicity, categories 1A, 1B, 2 | HP 11 Mutagenic |
| | Carcinogenicity, categories 1A, 1B, 2 | HP 7 Carcinogenic |

| Pictogram | Physical hazard classes | Hazard properties |
|---|---|---|
|  | Reproductive toxicity, categories 1A, 1B, 2 | HP 10 Toxic for reproduction |
| | Specific target organ toxicity following single exposure, categories 1, 2 | HP 5 Specific Target Organ Toxicity / AspirationToxicity |
| | Specific target organ toxicity following repeated exposure, categories 1, 2 | |
| | Aspiration hazard, categories 1, 2 | |
|  | Acute toxicity (oral, dermal, inhalation), category 4 | HP 6 Acute Toxicity |
| | Skin irritation, categories 2, 3 | HP 4 Irritant |
| | Eye irritation, category 2 | |
| | Skin sensitization, category 1 | HP 13 Sensitising |
| | Specific target organ toxicity following single exposure, cat. 3. Respiratory tract irritation Narcotic effects | HP 5 Specific Target Organ Toxicity / AspirationToxicity |
| No pictogram | Acute toxicity (oral, dermal, inhalation), category 5 | Not applicable |
| | Reproductive toxicity – effects on or via lactation | Not applicable |
| Not subject to chemical labelling requirements | Not applicable | HP 9 Infectious |
|  | Hazardous to the aquatic environment – acute aquatic hazard, category 1 | HP 14 Ecotoxic |
| | Hazardous to the aquatic environment – long-term aquatic hazard, category 1, 2 | |

| Pictogram | Physical hazard classes | Hazard properties |
|---|---|---|
|  | Hazardous to the ozone layer | HP 14 Ecotoxic |
| No pictogram | Hazardous to the aquatic environment – acute aquatic hazard, categories 2, 3. | HP 14 Ecotoxic |
| | Hazardous to the aquatic environment – long-term aquatic hazard, categories 3, 4 | HP 14 Ecotoxic |