

**Information to communicate to the public**  
**on the establishment covered by the prevention scheme for**  
**major accidents involving hazardous substances**  
**BONDALTI CHEMICALS SA - Parque de Armazenagem de Aveiro.**

**Why should you read this document?**

This document contains information concerning each establishment covered by the prevention scheme for major accidents involving hazardous substances and for limiting their consequences for human health and for the environment, and also indicates where additional information can be obtained.

The occurrence of large-scale accidents (for example, fires, explosions, spillages) related to the release of hazardous substances present in establishments can endanger the workers of these establishments and the population in the surrounding area, as well as seriously affecting the environment.

Decree-Law no. 150/2015 of 5 August establishes the obligations to be met by the operators of these establishments in order to prevent the dangers and to limit the consequences of major accidents. This document therefore aims to fulfil the provisions in no. 1 of article 30 of that legal document.

**Who is this information for?**

The information contained herein is the responsibility of the establishment's operator. Part of the information – concerning the warning methods, the self-protection measures for people to take in the event of an accident and the External Emergency Plan – is drawn up in conjunction with the City Council, in particular with the Municipal Civil Defence Service.

## A. General information

### Identification of the establishment

Name / Trade name of the operator	<i>BONDALTI CHEMICALS, SA</i>
Name of the establishment	<i>Parque de Armazenagem de Aveiro</i>
Address of the establishment	<i>Terminal de Granéis do Porto de Aveiro</i>
Parish	<i>Gafanha da Nazaré</i>
Municipality	<i>Ílhavo</i>

### Context of the establishment in the major accident prevention scheme (Decree-Law no. 150/2015 of 5 August)

Establishment covered by the lower level	
Establishment covered by the higher level	<i>x</i>

### Provisions contained in the prevention of major accidents scheme

#### Communication (article 14 of Decree-Law no. 150/2015 of 5 August)

Submission date of the notification / communication	<i>31 January 2020</i>
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#### Safety Report (article 17 of Decree-Law no. 150/2015 of 5 August)

Submission date of the safety report	<i>12 October 2018</i>
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#### Domino effect<sup>1</sup> (article 26 of Decree-Law no 150/2015 of 5 August)

Date on which the Portuguese Environment Agency communicates that the establishment is included in the domino effect group to which the establishments mentioned below belong.		<i>Did not communicate</i>	
Name of the establishment	Full address of the establishment	Mark the option applicable to each establishment	
		Lower level	Higher level
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### Possibility of occurrence of serious major accidents with transboundary effects

Due to its geographical location, it has not been identified the possibility of major accidents with transboundary effects, in the scope of the *Convention of the United Nations Economic Commission for Europe on the Transboundary Effects of Industrial Accidents*<sup>2</sup>.

<sup>1</sup> Domino effect establishments – lower or higher level establishments or groups of establishments in which the probability or the consequences of a major accident are greater due to the geographical position and to the proximity of these establishments and their inventories of dangerous substances.

<sup>2</sup> Convention of the United Nations Economic Commission for Europe on the Transboundary Effects of Industrial Accidents – (TEIA Convention) – This Convention aims to prevent, prepare and react to industrial accidents capable of causing transboundary effects, including the reaction to the effects of these accidents caused by industrial establishments and the international cooperation relative to mutual assistance, research and development, information exchange and technology exchange in the area of prevention and control of industrial accidents. More information at <http://www.apambiente.pt> > Instrumentos > Prevenção de Acidentes Graves > Convenção ETAI

**Inspection** (article 35 of Decree-Law no. 150/2015 of 5 August)

Date of the last IGAMAOT (Office of the Ministries of the Environment, Land Planning and Energy and of Farming and the Sea) inspection to check compliance with Decree-Law no. 150/2015	12 March 2019
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**B. Description of the establishment and of the measures to prevent major accidents involving hazardous substances**

**C.**

**Simple description of the activities undertaken in the establishment**

The Aveiro Storage Park of Bondalti Chemicals, is located at Gafanha da Nazaré. The Park is located at the north of Gafanha da Nazaré, in the Chemical Bulk Terminal area, where the two arms of the Aveiro estuary are separated.

The Aveiro Storage Park has a storage area, with pipes for chemicals movements and shipping islands, support buildings, and a jetty.

The circuits are groups of equipments that allow the transfer operations between the reception and expedition places and the storage tanks.

The Park can receive the products through ships docked at the jetty, at the Liquid Bulk Terminal of the Port of Aveiro.

Nitrobenzene and Aniline, are stored in tanks and dispatched by ship and if necessary, the expedition of the products stored in these tanks will also be able to be, accomplished by vehicles cistern.

The Benzene stored in tanks only will be able to be sent by vehicles cistern.

The Park of Aveiro receives, by road cistern, Aniline and Nitrobenzene. These products are unloaded at dedicated islands, through bombs and/or with the aid of nitrogen pressure.

Thus, the main operations involved in the Aveiro Storage Park are:

A - loading or unloading of ships;

B - the loading or unloading of tank vehicles.

Main CAE <sup>3</sup> (Economic Activity Code)	20144 – Manufacture of other basic organic chemical products, n.s.
Other CAE Codes	52102 - Non-cold storage

<sup>3</sup> Portuguese classification of Economic Activities, Revision 3, approved by Decree-law no. 381/2007 of 14 November, which constitutes the common framework for classifying economic activities to be adopted at national level.

***Hazardous substances present in the establishment***

Substances included in Part 1 of annex I of Decree-Law no. 150/2015 of 5 August	Hazard warnings
<b>Section «H» - HEALTH HAZARDS</b>	
H2 Acute Toxicity	H301: Toxic if swallowed H331: Toxic if inhaled
<b>Section «P» - PHYSICAL HAZARDS</b>	
P5c Inflammable Liquids	H225: Highly flammable liquid and vapour
<b>Section «E» - ENVIRONMENTAL HAZARDS</b>	
E1 Hazardous for the aquatic environment	H400: Very toxic to aquatic life H410: Very toxic to aquatic life with long lasting effects
<b>Section «O» - OTHER HAZARDS</b>	
Substances included in Part 2 of annex I of Decree-Law no. 150/2015 of 5 August	Hazard warnings
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***Main types of major accident scenarios that might occur at the establishment, possible consequences for the surroundings (people and environment) and existing control measures at the establishment***

Accident scenario	Potential effects of the accidents	Existing measures to deal with the accident scenario
Fire	<p>Effects on human health, goods and environment if they are directly affected by the fire.</p> <p>Smoke clouds may be generated that can cause respiratory problems and ash dispersal.</p> <p>Overheating of adjacent areas may lead to the ignition of fuels in other places.</p>	<ul style="list-style-type: none"> <li>• Preventive maintenance and regular inspections;</li> <li>• Supervision of the plant;</li> <li>• Connection of equipment to the grounding network;</li> <li>• Automatic shutdown system of the output lines of the storage tanks;</li> <li>• Water curtain sprinklers and other fire-fighting measures;</li> <li>• High availability of water supply to the fire-fighting network;</li> <li>• Control of retention basins;</li> <li>• Containment of liquid spillages creating barriers with absorbent material;</li> <li>• Use of foam on liquid surface;</li> <li>• Fire detection net;</li> <li>• Flammable gases detection net;</li> <li>• Training of internal staff in firefighting;</li> <li>• Activation of the Internal Emergency Plan.</li> </ul>
Explosion	<p>May have serious consequences for human health, goods and environment surrounding the establishment.</p> <p>The effect of the shock wave may affect people directly or following damage to structures.</p> <p>Fires may start in other places affected by the explosion.</p>	<ul style="list-style-type: none"> <li>• Preventive maintenance and regular inspections;</li> <li>• Supervision of the plant;</li> <li>• EX equipment;</li> <li>• Connection to the grounding network of the equipment;</li> <li>• Automatic shutdown system of the output lines of the storage tanks;</li> <li>• Equipment/plant shutdown and inertisation with nitrogen;</li> <li>• Tanks instrumentation level control;</li> <li>• Safety valves on lines, tanks and critical equipment;</li> <li>• Activation of the Internal Emergency Plan.</li> </ul>

Accident scenario	Potential effects of the accidents	Existing measures to deal with the accident scenario
Projection of fragments	Fragments of recipients or of structures close to the explosion may be projected at high speed, causing major harm to people and goods.	<ul style="list-style-type: none"> <li>• Preventive maintenance and regular inspections;</li> <li>• Supervision of the plant;</li> <li>• EX equipment;</li> <li>• Connection to the grounding network of the equipment;</li> <li>• Automatic shutdown system of the output lines of the storage tanks;</li> <li>• Equipment/plant shutdown and inertisation with nitrogen;</li> <li>• Safety valves on lines, tanks and critical equipment;</li> <li>• Activation of the Internal Emergency Plan.</li> </ul>
Spillage of substances hazardous for the aquatic environment	Contamination/pollution of water resources (e.g. drinking water supply sources, rivers, estuaries, underground reserves, beaches and other zones on the maritime coast) in the establishment's surroundings.	<ul style="list-style-type: none"> <li>• Preventive maintenance and regular inspections;</li> <li>• Supervision of the plant;</li> <li>• Existence of retention basins in all the hazardous product tanks;</li> <li>• Retention tanks in the effluent network;</li> <li>• Application of containment measures and collection of contaminated soil;</li> <li>• Gas and vapour net;</li> <li>• Safety valves on lines, tanks and critical equipment;</li> <li>• Activation of the Internal Emergency Plan.</li> </ul>
Release of contaminated effluents resulting from fire-fighting	Contamination/pollution of water resources (e.g. drinking water supply sources, rivers, estuaries, underground reserves, beaches and other zones on the maritime coast) in the establishment's surroundings.	<ul style="list-style-type: none"> <li>• Retention tanks in the effluent network;</li> <li>• Application of containment measures and collection of contaminated soil;</li> <li>• Effluents liquid monitoring;</li> <li>• Activation of the Internal Emergency Plan.</li> </ul>
Others	---	---

**Immediate action by the operator in the event of a major accident**

Under the terms of article 28 of Decree-Law no. 150/2015 of 5 August, in the event of a major accident, the operator:

- Immediately activates the emergency mechanisms, namely the internal emergency plan or simplified internal emergency plan.
- Immediately informs the security forces and services necessary for immediate intervention, as well as the city council, of the occurrence.

*Other measures*

Warn Administration of Porto de Aveiro and neighbouring companies, provide environmental tracking team and a technician to assist the Municipal Civil Defence of Estarreja.

***General information on the way the interested public shall be warned in the event of a major accident and adequate information on the self-protection measures to be adopted by the people in the establishment's surroundings***

Consult the ÍLHAVO External Emergency Plan.

***Reference to the External Emergency Plan drawn up to deal with the effects outside the establishment resulting from an accident***

[https://www.cm-ilhavo.pt/cmilhavo/uploads/writer\\_file/document/5331/PMEPC\\_Ilhavo\\_Rev2017 - Consulta Publica.pdf](https://www.cm-ilhavo.pt/cmilhavo/uploads/writer_file/document/5331/PMEPC_Ilhavo_Rev2017_-_Consulta_Publica.pdf)

31<sup>st</sup> of January 2020

**Where can further information be obtained?**

→ About the establishment

Name of operator	<a href="#">BONDALTI CHEMICALS, S.A.</a>
Address of establishment	<a href="#">Rua do Amoníaco Português no. 10, Beduído</a> <a href="#">3860-680 Estarreja</a>
Telephone	<a href="#">234 800 300</a>
Email	<a href="mailto:bondalti@bondalti.com">bondalti@bondalti.com</a>
Website	<a href="http://www.bondalti.com">www.bondalti.com</a>

→ About the warning method and self-protection measures for people in the event of an accident and on the drawing up of the External Emergency Plan

**City Council**

Name	<a href="#">Câmara Municipal de Ílhavo</a> <a href="#">Gabinete de Proteção Civil</a>
Address	<a href="#">Avenida 25 de Abril</a> <a href="#">3830-044 ÍLHAVO</a>
Telephone	<a href="#">234 329 605</a>
Email	<a href="mailto:dgesu@cm-ilhavo.pt">dgesu@cm-ilhavo.pt</a>
Website	<a href="http://www.cm-ilhavo.pt">www.cm-ilhavo.pt</a>

→ About the implementation of Decree-Law no 150/2015 of 5 August

**Agência Portuguesa do Ambiente | Departamento de Avaliação Ambiental**

[geral \[at\] apambiente.pt](mailto:geral@apambiente.pt)

[Rua da Murgueira, 9/9A – Zambujal Ap. 7585 | 2610-124 Amadora](#)

[Telephone 21 472 82 00 | Fax 21 471 90 74](#)

On the website of the Portuguese Environment Agency:

[www.apambiente.pt](http://www.apambiente.pt) > Instrumentos > Prevenção de Acidentes Graves

**National Civil Defence Authority**

[geral \[at\] prociv.pt](mailto:geral[at]prociv.pt)

[Av. do Forte em Carnaxide | 2794 – 112 Carnaxide](#)

[Telephone 21 4247100 | Fax 21 4247180](#)

→ About the inspection of the establishment in the scope of article 35 of Decree-Law no 150/2015 of 5 August

**Office of the Ministers of the Environment, Land Planning and Energy and of Farming and of the Sea**

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