Information to be communicated to the public
on establishment covered by major accident prevention regime involving
dangerous substances

(SGL Composites, S.A)

Why read this document?

This document disclose to the public information relating to each establishment covered by major accident prevention regime involving dangerous substances and the limitation of their consequences for human health and the environment, and also indicates where it can be obtained additional information.

The occurrence of major accidents (eg fires, explosions, spills) related to the release of dangerous substances in establishments can put workers at risk of these establishments and the population in the surrounding and seriously affect the environment.

The Decree-Law No. 150/2015, dated August 5, lays down obligations for operators of establishments, in order to prevent hazards and to limit the consequences of major accidents. This document thus seeks to comply with the number 1 of Article 30 of that statute.

Who prepares the information?

The information presented is prepared by the operator. Part of information - that which refers to the forms of warning, the self-protection measures to be taken by population in case of accident and the External Emergency Plan - is prepared with the collaboration of the City Council, in particular with the Municipal Service of Civil Protection.
A. General Information

Identification of the establishment

<table>
<thead>
<tr>
<th>Name/Operation Identification</th>
<th>SGL Composites, S.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of the establishment</td>
<td>SGL Composites, S.A.</td>
</tr>
<tr>
<td>Address</td>
<td>Sitio da Barra a Barra, 2836-908 Lavradio</td>
</tr>
<tr>
<td>Parish</td>
<td>Lavradio</td>
</tr>
<tr>
<td>County</td>
<td>Barreiro</td>
</tr>
</tbody>
</table>

Framework of the establishment in the Major accident prevention Regime (Decree-Law No. 150/2015 of 5 August)

<table>
<thead>
<tr>
<th>Establishment on the lower tier level</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Establishment on the upper tier level</td>
<td>X</td>
</tr>
</tbody>
</table>

Obligations/legal procedures in major accident prevention regime

Communication (Article 14 of Decree-Law No. 150/2015 of 5 August)

| Date of the application of the notification / communication | 14-09-2018 |

Safety Report (Article 17 of Decree-Law No. 150/2015 of 5 August)

| Date of the application of the Safety Report | 19-01-2015 |

Inspection

| Date of last inspection IGAMAOT (General Inspection of the Ministry of Environment, Spatial Planning and Energy and Agriculture and the Sea) to check compliance with the Decree-Law No. 150/2015, of August 5 | 03-06-2019 |

B. Description of the establishment and the measures to deal with major accidents involving dangerous substances

Description in simple terms of the activities undertaken at the establishment

The process of acrylic fiber is based on the wet spun technology. SGL Composites process is characterized by very stable quality parameters, it is very flexible and has a good energy and environmental performance.

The production process is organized in different units that we describe briefly below:

Utilities & Services

* Solvent Recovery area
* Utilities area
* Tank farm area

Production of intermediary products

* Continuous Polymerization
### Hazardous substances present in the establishment

<table>
<thead>
<tr>
<th>Substances included in Part 1 of Annex I of Decree-Law No. 150/2015, of August 5</th>
<th>Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Section ‘H’ - HEALTH HAZARD</strong></td>
<td></td>
</tr>
</tbody>
</table>
| H2 Acute Toxicity | H301 - Toxic if swallowed  
H311 - Toxic in contact with skin  
H331 - Toxic by inhalation |
| **Section "P" - HAZARDS PHYSICAL** | |
| P2 Flammable gases | H220- Flammable gases |
| P5a Flammable Liquids | H225 Liquid-Vapor highly flammable  
H226 Liquid-Vapor highly flammable |
| P8 liquids and oxidizing solids | H272- May intensify fire; strong oxidizer |
| **Section ’E’ - ENVIRONMENTAL HAZARDS** | |
| E1 Hazardous to the aquatic environment | H400 - Very toxic to aquatic organisms  
H410 - Very toxic to aquatic organisms and may cause long lasting effects |
| E2 Hazardous to the aquatic environment | H411 - Toxic to aquatic organisms may cause long lasting effects |
| **Substances included in Part 2 of Annex I of Decree-Law No. 150/2015, of August 5** | Hazard |
| Ammonia | H331 - Toxic by inhalation  
H400 - Very toxic to aquatic life with long lasting effects  
H221 - Highly flammable liquid and vapor |
| Diesel | H226 - Highly flammable liquid and vapor  
H411 - Toxic to aquatic life with long lasting effects |

### Main types of major-accident scenarios that may occur in the establishment, possible consequences for the environment (population and environment) and existing control measures in the establishment

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1 Classificação Portuguesa de Atividades Económicas, Revisão 3, aprovada pelo Decreto-Lei n.º 381/2007, de 14 de novembro, que constitui o quadro comum de classificação de atividades económicas a adotar a nível nacional.
<table>
<thead>
<tr>
<th>Accident scenario</th>
<th>Potential effects of accidents</th>
<th>Measures to deal with the accident scenario</th>
</tr>
</thead>
</table>
| **Fire**          | Effects on human health, property and the environment, whether they were directly affected by the fire. Can generate smoke clouds that cause respiratory problems and dispersion of ash. Overheating of adjacent areas can lead to the ignition of fuels elsewhere. | -Internal Emergency Brigade  
-2nd intervention means, foam cannons and water and fire-fighting vehicle.  
-Existence of foam flooding systems in tanks and their retention basins, in order to to eliminate the release of toxic gases.  
-Action in emergency in accordance with the Internal Emergency Plan (PEI)  
-Evacuation and warning procedures in emergency according to the PEI  
-Use of monitoring systems and advanced technologically control and explosion-proof equipment at the project level prevention measures (were respected in the design distances between devices), inspections and periodic testing of equipment. |
| **Explosion**     | It may have severe consequences for human health, property and the environment in the surrounding property. The effect of the shock wave can affect people directly or following damage to structures. It is possible to start fires elsewhere affected by the explosion. | -Water lines to cooling buildings and equipment included in surround (and other procedures identical to the previous scenario)  
-Electrical facilities installed in dangerous areas are explosion-proof (Class 1 and 2) |
| **Flying Fragments** | Fragments of containers or explosion nearby structures can be designed with great speed causing serious effects on people and property. | Safety distances between equipment and buildings. |
| **Release of gaseous substances toxic to human health** | The effects associated with the release into the atmosphere of toxic substances can damage be reversible or irreversible damage to human health and even cause death, depending on the time of exposure to the toxic cloud | (Consequences of the previous scenarios, measures already presented) |
| **Releases of harmful substances into the aquatic environment** | Contamination / pollution of water resources (e. Sources of supply of drinking water, rivers, estuaries, groundwater reserves, beaches and other areas of maritime coast) in the surrounding property. | Retention basins in the storage areas. |
| **Release of contaminated waste from the fire fighting** | Contamination / pollution of water resources (e. Sources of supply of drinking water, rivers, estuaries, groundwater reserves, beaches and other areas of maritime coast) in the surrounding property. | Existência de bacia de retenção na zona de armazenagem  
-industrial sewage network, allowing in case of leakage, the conduct of stroke and intervention of water to the mixing tank and cooling |
Immediate action by the operator in the event of a serious accident

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

- Immediately triggers emergency mechanisms, including the internal emergency plan.
- Informs immediately the occurrence through the emergency numbers, the security forces and services necessary for immediate intervention and the city council.

Other measures

- Provide information to the neighboring companies;
- Request support from companies specialized in the treatment of waste;
- Request technical support from the product supplier.

General information about how the public concerned will be warned in the event of a serious accident and adequate information on measures of self-protection to be taken by the population in the surrounding property

Reference to the external emergency plan drawn up to cope with effects outside the establishment after an incident

26-09-2018

Where can be find additional information?

→ About the establishment

<table>
<thead>
<tr>
<th>Name</th>
<th>SGL Composites, S.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adress</td>
<td>Sitio da Barra a Barra, 2836-908 LAVRADIO</td>
</tr>
<tr>
<td>Telephone</td>
<td>+351 212066000</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:Geral.pt@sglcarbon.com">Geral.pt@sglcarbon.com</a></td>
</tr>
<tr>
<td>Website</td>
<td><a href="http://www.sglcarbon.pt">www.sglcarbon.pt</a></td>
</tr>
</tbody>
</table>

How the communication of warning and self-protection of the population in case of accident and on the development of the External Emergency Plan

City Council
On the implementation of Decree-Law No. 150/2015, of August 5

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

(*Portuguese Environment Agency | Department of Environmental Assessment*)

 geral [at] apambiente.pt  
Telephone +351 21 472 82 00 | Fax +351 21 471 90 74

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

**Autoridade Nacional de Proteção Civil**

(*National Civil Protection Authority*)

 geral [at] prociv.pt  
Adress: Av. do Forte em Carnaxide | 2794 - 112 Carnaxide  
Telephone 21 4247100 | Fax 21 4247180

On inspection the establishment under Article 35 of Decree-Law No. 150/2015, of August 5

**Inspeção-geral dos Ministérios do Ambiente, Ordenamento do Território e Energia e da Agricultura e do Mar**

(*General Inspection of the Ministry of Environment, Spatial Planning and Energy and Agriculture and the Sea*)

 igamaot [at] igamaot.gov.pt  
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Telephone +351 21 321 55 00 | Fax +351 21 321 55 62