INFORMATION
On safety measures and how to act in the event of a major industrial accident

1. **Company name, registered office address:**

Designation of the operator
Registered office address
AWW GROUP Spółka z o.o. (Ltd.)
Niedźwiady 45
62-800 Kalisz
NIP 96809805 REGON 36621408000000
tel: (62) 332 06 00, fax. (62) 332 06 99
email: aww@aww.com.pl

2. **Confirmation that the plant is subject to legislation and administrative provisions establishing a major-accident prevention system :**

AWW GROUP Spółka z o.o. Kalisz Plant Niedźwiady 45, 62-800 Kalisz based on the Regulation of the Minister of Development of 29 January 2016 on the types and quantities of hazardous substances present in the plant, determining the classification of the plant as a plant of increased risk or high risk of industrial accidents (Journal of Laws 2016, item 138), is classified as a plant of increased risk. Therefore, it results from the obligation to implement the Accident Prevention Programme and to make public all information specified in Article 261a(1) of the Environmental Protection Act.
Fulfilling the obligation resulting from Article 250 item 1 of the Act of 27 April 2001 - Environmental Protection Law, the plant operator (AWW GROUP Ltd.) notified the plant of a higher risk to the Municipal Chief of the State Fire Service in Kalisz. All documentation resulting from the Act, including the Accident Prevention Programme, was handed over to the Municipal Chief of the State Fire Service in Kalisz and to the Provincial Inspector of Environmental Protection in Poznań, Branch Office in Kalisz in 2021.

3. **Description of plant activities :**

The following activities are carried out at the site

- Reception of ethyl alcohol by road tankers;
- Receipt of ethyl alcohol from neighbouring production departments;
- Release of ethyl alcohol into road tankers;
- Release of ethyl alcohol to neighbouring production lines.

The technical condition of the plant and tanks is assessed as good. The plant operates in a 3-shift system from Monday to Friday.

4. **Characteristics of a hazardous substance occurring at the AWW GROUP Sp. z o.o. Site Kalisz Niedźwiady 45, 62-800 Kalisz**

The basis for the inclusion of the Plant in the group of establishments with increased risk of a serious industrial accident is ethanol with properties:

Table 1. Physicochemical properties of ethanol found at the Facility.

Lp.	**Physical and chemical properties**	**Ethanol/ethyl alcohol**
1.	Form	Volatile, clear liquid, odour characteristic of ethanol
2.	molecular weight [g/mol].	46
3.	initial boiling point and boiling range	78,3℃)
4.	Flash point [℃] 5.	17
5.	Temperatura samozapłonu [℃]	425
6.	lower explosive limit [vol %]	3,5
7.	Upper explosive limit [% v/v]	15
8.	Relative density [g/cm3]	0,81 w 21℃

The full physicochemical and toxicological characteristics of hazardous substances and an indication of the hazards they pose to human health and the environment both immediately and with delay can be found in the Material Safety Data Sheets for hazardous substances located at the GRUPA AWW Spółka z o.o. Kalisz Plant3
Niedźwiady 45, 62-800 Kalisz constituting Annex No. 4 to the notification GRUPA AWW Spółka z o.o. Zakład Kalisz Niedźwiady 45, 62-800 Kalisz (July 2021).

5. **Information on fire protection of the AWW GROUP Ltd.Kalisz Plant Niedźwiady 45, 62-800 Kalisz.**

Equipment and installations performing fire protection functions, used on the premises of the Plant:

Breathing valves

Each storage tank is equipped with breathing valves that regulate the pressure and vacuum inside the tank automatically, preventing the pressure and vacuum from rising above the permitted values.

Voltage reduction system

The power supply for the 24 V low-current equipment and indicators is supplied via a barrier that reduces the voltage to values considered safe at 12-14 V. The system operates on a continuous basis.

Flame arresters

The tanks of the individual storage facilities, with the exception of the 50 m3 tanks in storage facility 1, are equipped with a flame arrester designed to stop the spread of flames (detonation) for low-pressure tanks.

Explosion-proof electrical equipment

The electrical equipment in the emergency bath is in explosion-risk zone 2 and is therefore designed to meet at least category II 3G.

Vapour detection system

A detection system calibrated to ethanol vapours was implemented in the emergency baths of individual installations No. 1, 2 and 3. In addition, in the case of plant 3, inter-bottom sensors were used in connection with the construction of the tanks.

Alarm thresholds:

- 10% DGW - information to the operator,
- 20% DGW - acoustic-optical alarm.
- Once the 1st level alarm was triggered, procedures were put in place in the plant to prepare an AR foam agent for the Fire Brigade.4
- In the case of indoor ethanol storage - buildings 'D', 'H' and 'I' the gas detection system controlling mechanical ventilation calibrated to:
- 20% DGW - service information,
- -40% DGW - acoustic-optical alarm.

Alarm sirens outside the buildings.

Lightning protection system

A lightning protection installation in the form of masts was made for the individual storage lines.

Earthing system

Earthing installations have been made for the individual process lines for individual equipment and components including the tank car loading/unloading station.In the case of the tank car loading/unloading station, an earthing effectiveness control was used to prevent pumps from starting if earthing is ineffective.

Control and measuring equipment

Overfill protection system.

Monitoring the technological process - storage

There is a control room in the building on line 1, where the entire technological process, including emergency conditions, is monitored using visualisation programmes.

Fire circuit breaker

For production lines No. 1, No. 2 and No. 3 the power is switched off via the main power switch located on building No. 'E'

Fire alarm system.

In some of the buildings, a fire alarm system with a control panel in the reception area is used as additional protection. In the case of the New Kitroom building (building 'I'), the Old Kitroom (part of building H) and the Storage Building (building 'D'), the alarm sirens are located outside the buildings.

Mechanical and emergency ventilation.

In buildings where ethanol is stored, a mechanical ventilation system is used to limit the concentration of ethanol vapours. Ventilation system configured with an ethanol vapour detection system in the buildings.

6. Industrial accidents :

6.1 Major industrial accident scenarios

- Major industrial accident scenarios, including simulation, concern the following events:
- tank explosion
- spillage fire from tank to tray leakage in case of fittings failure,
- leakage from tank to tray via fittings - evaporation without fire,
- ignition of the spillage in the tray resulting from leakage of the tank contents - ignition
- 10 minutes after filling the tray.
- It should be noted that the scenarios presented are purely theoretical and very unlikely. Such a choice is intended to represent the worst possible scenario that could occur in this type of storage facility, thus allowing the worst theoretically possible outcomes to be predicted)

7. Information on how to alert and deal with the public in the event of an industrial accident.

7.1 General principles

- Alarm signals (alarms)

The occurrence of an industrial accident, fire or any other dangerous event posing a threat to employees and persons residing on the premises of the establishment is signalled by means of an alarm siren - a continuous signal lasting 3 minutes.
The alarm signal is activated by the ZRiOS Manager after receiving and confirming information about the hazard.
Activation of the siren signal is enabled by a button located on the gatehouse at the entrance to the plant.
Assembly point for evacuees :
A gathering point in the event of an evacuation designated at the main entrance gate to the plant site - applies to plant employees and occupants..There will be a competent person there to provide the State Fire Brigade with information on the evacuation process. (In case of unfavourable wind direction - the Evacuation Manager will determine another evacuation location).

- The warning message (in accordance with the procedures and instructions adopted in the establishment.
  There is a procedure for evacuation in the plant, which is contained in the Fire Safety Manual, which defines the general principles of evacuation, the responsibilities of the evacuation commander and the responsibilities of other employees in the event of a fire alarm or other emergency. Persons in the area at risk undertake evacuation at a given signal. If the conditions are right, they will provide assistance to those affected; if not, they will inform the relevant rescue services of those remaining in the affected areas.
- If necessary, the rescue manager determines the direction of evacuation and the assembly point, taking into account the direction of the wind, access of rescue services, etc.

List of emergency telephones

List	*Contact numbers*
Police	*112*
Fire Brigade *Municipal Command* *State Fire Brigade in Kalisz ul. Nowy Świat 40-42 62-800 Kalisz*	*998, 112* *Tel. tel. (62) 76-54-203 /secretariat* *tel. MSW (47) 771 76 00 fax. (62) 76-54-205 email: kmpspkalisz@psp.wlkp.pl*
Emergency services	*112*
Gas emergency service	*992*
Emergency Electricity Service	*991*
WIOŚ Delegation Kalisz ul. Piwonicka 19 62-800 Kalisz	*62 764 63 30*
WIOŚ Poznań Delegation Kalisz ul. Piwonicka 19 62-800 Kalisz	*61 827 05 00 – czynny od 07:00 do 15:00605 188 026 – tel. interwencyjny czynny od 15:00 do 07:00*
UDT Poznań	*61 850 46 00*
District Starost Office in Kalisz Pl. św. Józefa 5, 62-800 Kalisz Organisational Department Conducting emergency management matters, including PCZK The Secretary of the District of Kalisz	*tel. : (62) 501 42 00fax: (62) 757 26 22www.powiat.kalisz.pl www.bip.powiat.kalisz.ple-mail: powiat@powiat.kalisz.plSekretarz Powiatu Kaliskiegotel. 62 50 14 227.e-mail: organizacyjny@powiat.kalisz.pl*
Community Office Żelazków Żelazków 138 62-817 Żelazków	*tel. 62 769-10-08 fax. 62 752 18 81 e-mail: ug@zelazkow.plwww.zelazkow.pl*

7.2 **Procedure to be followed by the population residing or staying in the immediate vicinity of the AWW GROUP Ltd. Zakład Kalisz Niedźwiady 45, 62-800 Kalisz in case of a major accident.**

I. In the event of an industrial accident, it is envisaged to alert the public by means of an alarm siren - a continuous signal lasting 3 minutes.
The alarm signal is activated by the ZRiOS Manager after receiving and confirming information about the danger.
Activation of the siren signal is enabled by a button located on the gatehouse at the entrance to the plant.

Additional warning signals

- alarm sirens - mounted on other public buildings,
- public address devices - portable, mounted on vehicles (including emergency services),
- media announcements - broadcast on local radio stations and regional television,8

- Internet - websites of public entities

II. Proceedings

- In the case of a major industrial accident, declared as above, you should:
- Remain calm, counteract panic and fear.
- Do not approach the danger zone, do not enter the area of smoke or fumes
- substances,
- Follow the instructions announced by the emergency services and do not
- Do not obstruct the access of emergency services to the plant,
- Cut off the supply of water, electricity and other utilities.
- If you have a mobile phone take it with you along with the charger.
- Secure your own property. Lock your doors and windows (if you have blinds or shutters close them)
- them).
- Turn off fans, heating appliances and air conditioning.
- If you know of a person left in the household or neighbourhood (elderly,
- lonely,
- disabled, etc.) report this to the emergency services and/or take care of them.
- Leave the endangered area by going to the designated collection point provided by the
- Żelazków Municipality.
- Keep up to date with announcements made by the emergency services or the media.
- You will receive detailed information about the evacuation at your destination
- Residence

III. 24-hour emergency contact number - tel.663 820 588 - Security Building

IV. Kierownik Łukasz Kolonko tel. 507 862 129, adres mailowy: lukasz.kolonko@aww.com.pl

8. Detailed information on where to obtain additional information related to the AWW GROUP Ltd. Zakład Kalisz Niedźwiady 45, 62-800 Kalisz, subject to the requirements for confidential information established by national legislation.

Additional information concerning GRUPA AWW Spółka z o.o. Zakład Kalisz Niedźwiady 45,62-800 Kalisz, to the extent not covered by trade secret or business secret, may be obtained by sending a letter (request) to the following address:

GRUPA AWW Spółka z o.o. plant Kalisz Niedźwiady 45, 62-800 Kalisz
(tel.: (62) 332 06 00, fax. (62) 332 06 99
Niedźwiady 45
62-800 Kalisz
e-mail: aww@aww.com.pl
Website address of the company: www.aww.com.pl