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	<i>Environmental and Quality Policy</i>		Superseeds EP-ENG-03 - QP-ENG-02	
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Introduction

The Top Management of SPIGA NORD, aware of the needs expressed by its clients and all interested parties regarding product characteristics, adherence to scheduled deliveries, control of sales prices, and the reliability of the company's operational management system, is convinced that it must provide precise and concrete answers to these requests, as they represent the necessary condition for staying on the market. Therefore, the company intends to address the issues arising from pursuing this goal by adopting appropriate operational means, creating an environment suitable for the proper conduct of activities, and coordinating the empowerment of the personnel working within the company.

The Top Management of SPIGA NORD is similarly aware of the importance of protecting the environment, as well as health and safety in the workplace. It is committed to ensuring a sustainable approach aimed at safeguarding and protecting the environment, considering the protection of safety, health, well-being of people, and the preservation of the environment as a fundamental value in the operation and development of its activities.

Prodotti 100% naturali

Spiga Nord refined glycerol and polyglycerols are green products 100% derived from vegetable origin and GMO free raw materials. In fact, crude and refined glycerol used by Spiga Nord as raw materials are recovered as co-products in vegetable oils processing such as the splitting of oils for the production of fatty acids or the esterification of oils with methanol in the production of methyl esters.

Thanks to this green chain, our glycerol and polyglycerols have been approved by Ecocert Greenlife according to the ECOCERT and COSMOS Standards established for cosmetic raw materials.

Moreover Spiga Nord refined glycerol and polyglycerols are characterized by a Natural Origin Index of 1 in accordance with the criteria established by ISO 16128-1:2016-e and ISO 16128-2:2017 "Cosmetics - Guidelines on technical definitions and criteria for natural and organic cosmetic ingredients". The calculation used for this evaluation has been validated by a third certification body.

Due to their vegetable origin, Spiga's products can be used in formulations where the possibility to claim a 100% natural final product is an issue. This is particularly interesting in cosmetic applications or in technical applications in substitution of petrochemical origin components.


Glycerine, as well-known from literature data, is a "readily biodegradable" substance. Recently, Polyglycerines manufactured by Spiga Nord have also been tested according to "OECD 301B CO2 Evolution" method and resulted as "readily biodegradable" substances too.

Pure and Safe products

Our products are characterized by a very high chemical and microbiological purity and by the absence of human health dangerous substances such as residual solvents, micotoxins, pesticides, heavy metals, diethylene glycol and related substances in particular for pharmaceutical grade Glycerol.

All our finished products meet the requirements of R.E.A.C.H. (Registration, Evaluation, Authorization and restriction of Chemical substances) Regulation.

The registration of the products Pure Vegetable Diglycerine and Pure Vegetable Polyglycerine-3 has been duly completed; while Vegetable origin Glycerol has been included in the Annex V of Commission Regulation 1907/2006 and is therefore exempted from compulsory registration while the longer chain polyglycerols (Pure Vegetable Polyglycerine-4, Pure Vegetable Polyglycerine-6 and Pure Vegetable Polyglycerine-10) comply with the definition of Polymer and therefore they are exempted from a compulsory registration.

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Sustainable resources and energy saving

Our technical staff makes a great effort towards the implementation of sustainable solutions in the whole production process.

The optimization of energy consumption through the reuse of thermal vectors and technological water streams available and the use of the best available technologies is a characterizing element in the design of new Spiga Nord production plants; it also represents a main focus within the maintenance operations and optimization of existing production processes.

In addition, the company has identified the energy autonomy of the manufacturing site and the diversification of production sources among its priorities, with particular attention to the reduction of environmental impact resulting from these processes.

In this context the company has proceeded with the research and exploitation of alternative and renewable energy sources in the recent years and has finally completed the implementation of a photovoltaic plant in 2011.

The installation is composed by 2 sections: the first contains 384 photovoltaic modules in amorphous silicon (nominal power of each module: 0,120 kWp) and the second one is made of 144 modules (nominal power of each module: 0,80 kWp) and they have been installed in order to create a photovoltaic system, with a nominal capacity of 57,6 kWp. The energy production is totally exploited by Spiga Nord premises.

The nominal energy production per year is calculated in 64.153 kWh; it can be estimated that the same energy amount produced through traditional thermoelectric production would imply 28.870 kg of CO₂ emissions (ISPRA data indicate a reference value of 450 g CO₂/ kWh as specific reference impact for the production of electrical energy from fossil fuels for 2020 in Italy)

During 2019 the company started the design of a plant for a Combined Heat and Power (CHP), or “cogeneration” plant for combined production of electrical energy and heat; the installation and start up of the plant was completed in 2020.

Two gas turbines for a total installed power of 400 kWel allow the in-house production of electrical energy; exhausted fumes coming from the a. m. equipments are exploited by a heat recovery generator equipped with an integrated in duct air burner for the production of saturated steam. Both energy vectors are used in Spiga Nord manufacturing site and managed according to plants requests.

Combined production of heat and power allows the company to improve the overall efficiency of electricity and heat production as these plants combine electricity production technologies with heat recovery equipments. Increasing the conversion efficiency of power generation through the use of CHP technologies thus helps to reduce the use of fuel and, consequently, the overall environmental impact of power generation.


Based on the design data of the plant, it can be calculated a saving of primary energy corresponding to around 900.000 kg of CO₂ per year.

Furthermore, gas turbines installed by Spiga Nord are characterized by particularly effective combustion which reduces NO_x emissions to an order of magnitude below the limits applicable according to the current regulations.

Finally, the company has acquired the possibility to realize a **run-of-river power station for the production of hydroelectric energy** located in the neighborhood of Carasco. This plant will have an average capacity of 54,2 kW of production that will be entirely used in the manufacturing plant.

Thanks to this business, the amount of CO₂ emissions will be additionally reduced of 149.400 kg per year (estimation based on an annual productivity of 332.000 kWh per year).

The company has recently started a new project for the installation of another hydroelectric plant very close to the manufacturing site whose capacity would be entirely exploited by Spiga's premises.

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Politica per l'Ambiente e la Qualità

SPIGA NORD Top Management is intended to assure that this Environmental and Quality Policy is well understood, implemented and supported at any company level throughout the verification of objectives and the use of the tools of the management system.

This Policy is available in the Plant notice board and on the company website and is shared with relevant stakeholders.

The Company's purpose is to ensure that all activities are conducted in an efficient and affordable way by developing a business management system characterized by the following principles:

- Compliance with applicable laws obtained by availing itself both of internal qualified staff and external partners;
- Compliance with standards and requirements for the management of the production process related to the pharmaceutical, food and cosmetic market.
- Consistent application of technical regulations on products and contractual requirements;
- Continuous determination in the risk evaluation and assessment with reference to each company process and continuous effort with aim to the improvement of products, services and quality system in order to remove risks or at least reduce them to a minimum value.
- Continuous improvement of products' quality and service to the Customer through an ongoing research and development effort;
- Constant determination in research, elimination and prevention of non-conformities, because absolutely convinced that a defect not only leads to a corrective action and related compensation costs, but it can also mean a significant loss of image;
- Individual responsibility on matters related to quality implemented at all levels through appropriate specific training and staff awareness;
- According to continuous improvement purposes, an assiduous and constant collaboration with all relevant parties involved is pursued in the correspondent business processes in order to satisfy their requirements;
- Satisfaction of stakeholder requirements;
- The participation, awareness and empowerment of the staff (internal and external)
- Periodical verification of the context of the Company;
- Compliance with contractual and mandatory requirements;
- Verification of the efficiency of the management system for quality, environment and safety;
- The identification of specific goals and relevant plan to achieve them to be shared;
- The effort in the evaluation of risks and opportunities connected with the activity towards continuous improvement of environmental performances;
- Prompt management and investigation of non conformities and failures of the management system through the application of adequate and documented corrective actions;
- Ensuring a healthy and safe environment for people, both inside and outside the site.

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The participation of management in the implementation and maintenance of the management system

- Involving all personnel in achieving environmental, quality, and health-safety objectives, also through training and raising awareness about the correct management of issues related to the environment, health, safety, and quality
- Periodic review by Management of all topics, to verify the ongoing suitability, adequacy, and effectiveness of processes in line with this Policy,
- Dialogue with public authorities for managing issues, especially emergency situations, to control and reduce the consequences of potential events
- Effective communication aimed at addressing the needs and expectations of all interested parties (stakeholders), focused on reducing and preventing risks, to be achieved through involvement, as the primary voluntary compliance obligation to pursue,
- Commitment to improving performance, periodically measuring progress with appropriate indicators
- Periodic checks on compliance with laws and regulations
- High attention to significant environmental, health, safety, and quality issues, such as energy consumption, water usage, waste production, accidents, raw material consumption, risk assessment for personnel, and the impact of production processes

In addition, with attention to career development and salary adjustment, based on merit, the company promotes the staff commitment to achieve set objectives.

The Management, aware that the adoption of an Environmental and Quality Policy is not only functional to the obtainment of economic results but corresponds to a way of being inside and outside the Company, pays particular attention to the workplace health, safety and comfort by adopting, consistently with economic performance, a policy of compliance and continuous improvement of infrastructure.

All employees are encouraged to operate in accordance with the procedures, collaborating to create an organizational structure capable of ensuring long-term efficiency, constant sensitivity towards the environment, health, and safety, a mindset for improvement, and compliance with legal regulations. The protection of the environment, health, and safety is everyone's responsibility. Spiga Nord's objectives are simple: zero accidents, minimizing complaints, and no harm to people or the environment.

In order that Environmental and Quality Policy is not only a statement of principle, the Management identifies yearly clear, achievable and measurable objectives, providing adequate resources and trained personnel in order to achieve them.

These goals are fixed taking into due consideration:

- the market reference framework for the period;
- the economic and financial status of the company;
- the forecast for the temporal evolution of the previous factors;
- the reality that emerges from the data and quality assessments;
- the infrastructures, resources and level of training available in the company.

Are explicitly defined in a separate document shared with all company functions and extended to the staff and they include:

- the general objectives for the organization;
- the priority investment program;
- the objectives regarding safety and environmental protection;
- the objectives to be achieved to improve the quality of products and the related production process;
- the objectives to be achieved for the internal management processes;
- other quality objectives.

Top Management quantifies the objectives on the basis of some indicators that allow to evaluate the results and define with the area managers (CA) the actions to be taken in order to ensure their achievement.