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With all the difficulties that have characterised 2020 and 2021, and that we are still unfortunately enduring at the beginning of 2022, I believe that we as operators in the sector can be proud of how we and our teams have

handled and managed situations that we have never experienced before.

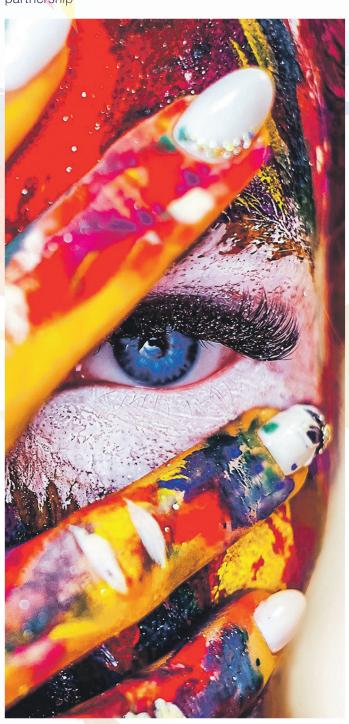
The responsiveness and professionalism shown should give everyone the confidence in their ability to face the various challenges that lie ahead. For us at MIFAR, in particular, they are a further stimulus to prove that we are an innovative company on the market, and a serious and reliable partner for our customers and stakeholders.

We have therefore decided to create a quarterly newsletter for our customers and the market in general, as a direct line to inform and keep Mifar's communication alive: about our projects, our products, our innovations and the industry regulations to comply with.

In this first issue, we will tell you about the partnership with Nordmann, an international leader in the distribution of chemical products; we will outline a scenario on the flexible food packaging market and how our Compostable Chips fit into it.

Finally, in the Regulatory section we will provide a guide on the provisions of Regulation 2020/878 for the compilation of Safety Data Sheets.

Happy reading! Andrea Meli



HIGHLIGHT NEWS ___

NORDMANN AND MIFAR

SYNERGIES, DEVELOPMENT and SUSTAINABILITY as key elements for a successful a partnership

The first General Meeting between Nordmann and Mifar took place last November in Hamburg after five months from the launch, on last July 2021, of the distributorship agreement between Mifar and Nordmann Group on all European countries (Spain, France and Portugal excluded). The objective of the meeting, which involved the main company functions of both parties, was to outline a path of common development on European markets, after a very positive start of the collaboration. The collaborative scheme set up between Nordmann and Mifar has highlighted the benefit of the existing organizational synergies and a common cultural vision between the two companies. The high skills in logistics and commercial management - which make Nordmann a leading international company - have been well integrated with the technical capabilities of MIFAR, registering a remarkable growth in sales compared to the same period / markets in UK, Germany, Italy, Benelux, Switzerland, Austria and Central-Eastern Europe of the year 2019.

The collaboration with Nordmann has made possible to have Mifar products readily available on the market by proactively responding to serious shortages of main raw materials, to criticalities of transport and in general to all problems that have involved the business world stressed by the pandemic. Another advantage is to guarantee a single qualified supplier able to offer various solutions for the production needs of customers. This is thanks to the large portfolio managed by Nordmann, which has identified technically advanced synergies with Mifar products. In particular, the validity of the integration of the various technical solutions offered by MIFAR with SUDARSHAN pigments for the inks and coatings markets and with the distribution of SUN CHEMICAL pigments on the cosmetic market, an integration that can constitute an authentic technical benchmark for applications and productions dedicated to nail lacquers.

In the medium term, the partnership could provide further integrated one stop shop solutions by both companies, dedicated to support sustainable production processes. A specific focus was also launched for technical solutions based on the compostability of packaging, considering that the COMPOSTABLE Chips range by Mifar can be strategically integrated with products in the Nordmann portfolio.

The positivity of the meeting and the results obtained in such a short time by NORDMANN, represent important symptoms for a growth and collaboration that both companies see in the long term and of extreme importance and effectiveness.

Andrea Meli, CEO Mifar

Mifar is an important new partner for Nordmann and we are looking forward to a long-term and successful partnership. Its specialty products and high-performance pigment-preparations in powder-form fits perfectly into our portfolio for the Coatings & Inks industry. We are certain that the collaboration with Mifar will provide a lot of new growth potential for both partners.

Peter Kuchenbrod, Business Manager Coatings & Inks, Nordmann



FLEXIBLE FOOD PACKAGING



Andrea Meli, Chief Executive Officer

TRENDS AND MARKET DATA

Supported by innovation in technology and products, by expansion into markets and the ability to adapt to the ever-changing environment, the flexible packaging industry has grown steadily over the last 20 years, with only two exceptions: the downturn in

2001 due to the September 11th terrorist attacks and the "Great Recession" in 2009.

USA. The top 100 flexible packaging companies in the

US account for 81% of the industry's total turnover, with an average size of 248 million dollars. The top 10 flexible packaging manufacturers account for just over half (59%) of revenues in the flexible packaging industry and have an average turnover of 1.7-1.8 billion dollars. Most of the flexible packaging factories are lo-

Global Packaging Market Glass Board 234 3% 254 1.6% Rigid Plastic 166 4,1% 200 3,8% 182 2.6% Metal 108 1,7% 114 1,1% Glass 50 2.2% 53 1.0% Others 0,2% 39 0,8 Flexible Plastic Rigid Plastic Total 756 3,0 841 1,8% 248,5 2,6% 2% 2,4% 1,5% 3,9% 25,8 Healthcare 4,3% 37,8 344,8 Transport /Industria 372 3,4% Other 2,4% 96,4 Total 756 3.0% 841 1.8% FPE - Scientific and Regulatory Affairs Committee Meeting, Amsterdam

cated in the Midwest, although there are many factories in the Southeast and in California.

EUROPE. Flexible packaging is the most widely used packaging in the food industry (over 40% of packaging, excluding beverages), yet its weight accounts for only 10% of the total weight of food packaging. In fact, for the same quantity of packaged food product, flexible packaging is the lightest and most efficient packaging. This means that, with less raw material, it is possible to guarantee the hygiene of the packaged product, the safety of the consumer and to offer the technological properties required by the market (sealability, gas and vapour barrier, thermal resistance, mechanical properties, etc.). State-of-the-art biodegradable and

compostable polymers are not always able to guarantee these aspects (and are therefore used only minimally). Flexible packaging also offers logistical advantages which translate into environmental benefits: the lighter and more compact the product packaging is, the easier it is to optimise loading space and reduce total emissions for the same quantity of goods transported. It has been estimated that if flexible packaging were chosen for all packaged products, it would be possible every year to:

- educe the packaging materials used by around 80%;
- ecrease greenhouse gas emissions by 42 million tonnes (equal to 40% of what was produced in the city of London in 2016):
- save more than 270 million cubic metres of water.

PURCHASING HABITS AND CONSUMER TRENDS

Global consumers are now demanding more sustainable packaging. Particularly for food, the pandemic has made consumers even more aware of issues such as short labelling or tracking, where packaging sustainability is a must.

Packaging must be innovative to adapt to new

consumer expectations, as well as functional and attractive. Packaging is now a consolidated marketing tool, some theorists even go as far as to suggest that it represents the "5th P" of the marketing mix: "product, price, promotion, place."

With the exception of the most basic commodities, it is well known that consumers no longer buy just a product, but a purchasing "concept" that reflects and confirms their lifestyle choices. In this sense, packaging is the best "business card" for the product-concept, also because, as confirmed by a recent research by the DNV certification body, packaging remains the main source of product information for the consumer.

COMPOSTABLE CHIPS

PRODUCING WITH LOW ENVIRONMENTAL IMPACT



Flavio Salvatori, Responsabile R&D

Sustainability is a key issue for the environment and market, especially when it comes to packaging which is expected to have a circular life cycle. European consumers are inclined to choose products sold in cardboard rather than plastic or metal because cardboard is easier to recycle. Food and cos-metic companies are working

hard to produce sustainable packaging.

Mifar is directly involved in developing sustainable food packaging solutions. Sustainability requires continuous innovation and close collaboration between the companies involved in the production process. Since 2015, Mifar has been making a contribution to the production chain by introducing a special line of compostable chips onto the market. Compostable Chips are used to colour compostable and biodegradable packaging for glasses, napkins, food trays, shopping bags, shipping envelopes, paper towels, toilet paper, etc., guaranteeing the consumer to dispose of what can no longer be reused, thus respecting the environment. OK Compost Industrial products certified by the TÜV AUSTRIA Group meet the requirements of the UNI EN 13432 standard published in 2000, which describes the essential criteria of the Directive on packaging and packaging waste (94/62/ CE), setting recycling targets of 65% on all packaging waste by 2025 and 70% by 2030.

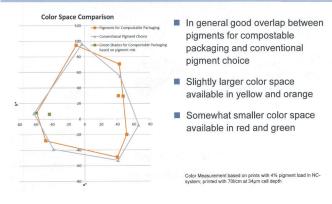
The line of chips developed with Sun Chemical Colors & Effects is nitrocellulose-based, and made specifically for manufacturers who need to keep their products compostable. This is made possible by the compatibility of the chips with biodegradable and compostable printing media, as well as the reduced presence of heavy metals and the total absence of negative effects during the composting process.

The need to offer compostable chips has led to the exploration of new colour indexes for printing. In fact, organic pigments traditionally used do not meet the requirements of compostability and bio-degradability. Tests comparing the new compostable pigments with the classic ones have shown that:

 there is generally a good overlap between the colour space of compostable and traditional chips;

- there is a slight reduction in the red and green colour spaces;
- there is a slight increase in the yellow and orange colour spaces.

Color Space Comparison versus conventional pigments



Colorimetric measurements were made on prints with 4% of pigment in a Nitrocellulose-based system (printed with 70l/cm at 34µm as cell depth).

Mifar's compostable chips offer manufacturers the advantage of producing the quantity of finished products best suited to their needs, without having to grind the ink, and dispersing the chips using a Cowles blade for 90 to 120 minutes depending on the working conditions. Chip dispersion is ideal for producing quantities of ink between 100 and 1000 kg, allowing even small batches to be pro-duced, while pigment production ranges from 1000 kg to 4000/5000 kg. The ink produced by dispersing the chip can be used immediately, thus reducing excess quantities to be stored. There is the added advantage of being able to store the solid predispersion in resin, i.e. the chip, in its original 20-kg packaging, which reduces storage risks.

CRITERIA FOR VERIFYING THE COMPOSTABILITY OF A PRODUCT

- Biodegradation: degradation by the effect of specific enzymes;
- Disintegration/fragmentation: the physical decomposition of the material into small pieces. Non-fragmented residues greater than 2 mm must not exceed 10% of the weight of the initial material;
- Control of the quantities of heavy metals (As, Cd, Cr, Cu, F, Hg, Mi, Ni, Pb, Se, Zn);
- Ecotoxicity: a check to ensure that plant growth is not adversely affected.

REGULATORY AREA

COMMISSION REGULATION (EU) 2020/878 OF 18 JUNE 2020



Alice Vlangar, Regulatory Affairs Manager

Mifar is in the process of adapting to Regulation 2020/878 for the compilation of the Safety Data Sheets of its products, with plans to conclude the transitional phase by the first quarter of 2022. Here is a Vademecum on

what the Regulation establishes and the details of the modified sections of the SDSs.

Commission Regulation (EU) 2020/878 of 18 June 2020 amends Annex II to Regula-tion (EC) no. 1907/2006 of the European Parliament of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

The Regulation lays down the requirements for the compilation of Safety Data Sheets (SDS) used to provide information on chemical substances and mixtures in the European Union, and from 1 January 2021 replaces Regulation 2015/830(2) for the compilation of Safety Data Sheets. The main changes introduced by Regulation 2020/878 are:

- specific requirements for nanoforms of substances,
 which must be included in the safety data sheets
- Specific requirements have been identified as relevant for substances and mixtures with endocrine disrupting properties;
- Adaptation to the sixth and seventh revision of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS);
- Indication in the section of the SDS where the unique formula identifier (UFI) should appear concerning hazardous mixtures supplied for use at industrial sites and unpackaged hazardous mixtures, introduced by Annex VIII of Regulation (EC) no. 1272/2008 (CLP);
- Inclusion, where available, of specific concentration limits, multiplying factors and acute toxicity estimates set in accordance with Regulation (EC) no. 1272/2008
- Regulation 2020/878 shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union and shall apply from 1 January 2021.
- For products already placed on the market as at 1 January 2021, and therefore related to SDSs prepared according to Regulation 2015/830, a transitional period is provided until 31 December 2022, in order to adapt them to the new requirements.



REGULATORY AREA

AMENDED SECTIONS OF THE SDS

Section 1: identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

The Unique Formular Identifier (UFI) must be provided in cases where the supplier is allowed to waive the requirement to print or affix the UFI on the label of a hazardous mixture or, alternatively, on the packaging in close proximity to the other hazard information.

Section 2: Identification of hazards

2.3 Other hazards

Indication must be given as to whether the substance has been included in the candi-date list of Substances of Very High Concern (SVHC) pursuant to article 59.1 of REACH due to endocrine disrupting properties, and whether the substance is a sub-stance identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Information must be provided for each such substance that is present in the mixture at a concentration equal to or greater than 0.1% by weight.

Section 3: Composition/information on ingredients 3.1 Substances

If available, indication must be given of the specific concentration limit, the M-factor and the acute toxicity estimate for substances included in Part 3 of Annex VI to Regulation (EC) no. 1272/2008 or determined in accordance with Annex I to that regulation.

If the substance is registered and it covers a nanoform, the particle characteristics that specify the nanoform in Annex VI of REACH must also be indicated. If the substance is not registered, but the safety data sheet covers nanoforms, indication must be given of the particle characteristics that have an impact on the safety of the substance.

3.2 Mixtures

Updates have been introduced for adaptation to technical progress (ATP) of the CLP (Classification, Labelling and Packaging of substances and mixtures).

Section 9: Physical and chemical properties

The information to be provided on the physical and chemical properties of the sub-stance or mixture has been revised.

Section 10: Stability and reactivity

10.2 - Chemical Stability

10.4 - Condition to avoid

New information requirements for desensitised explosives has been added.

Section 11: Toxicological information

11.2 - Information on other hazards

Information on adverse health effects caused by substances identified as having en-docrine disrupting properties must be provided.

Section 12: Ecological information

The conditions for generation of data related to ecological information has been up-dated.

Section 14: Transport information

Various requirements regarding information on transport/shipment of mixtures have been introduced.

Section 15: Regulatory information

15.1 - Safety, health and environmental regulations/legislation specific for the sub-stance or mixture

In cases where the substance or mixture is subject to authorisation under Title VII of REACH, information must be provided on possible conditions and monitoring ar-rangements imposed on the downstream user.

FLASH NEWS

Farewell to Giorgio Marturano!
From 1 April 2022, he will cease working as Plant Manager of Mifar.
An experience that began in 2015, carried out with perseverance and great dedication. A sincere thank you from the whole team.
Congratulations on reaching this milestone!

Two renewals at Mifar with the ISO 9001:2015 certification, for the management of company processes aimed at continuous improvement of productivity. Confirmation of the recognition of Mifar OK Compost compostable products by TÜV Austria.

New professionals continue to enter Mifar. After a long experience abroad, in September 2021 Elena Ubbiali joined the company as Customer Service Manager for the Distribution area. Welcome!

The information herewith given is based on our present knowledge. Any conclusion and recommendation are made without liability on our part. Buyers and users are advised to make their own assessment under their own conditions and for their own requirements.

Mifar is member of

works in compliance with

with products











