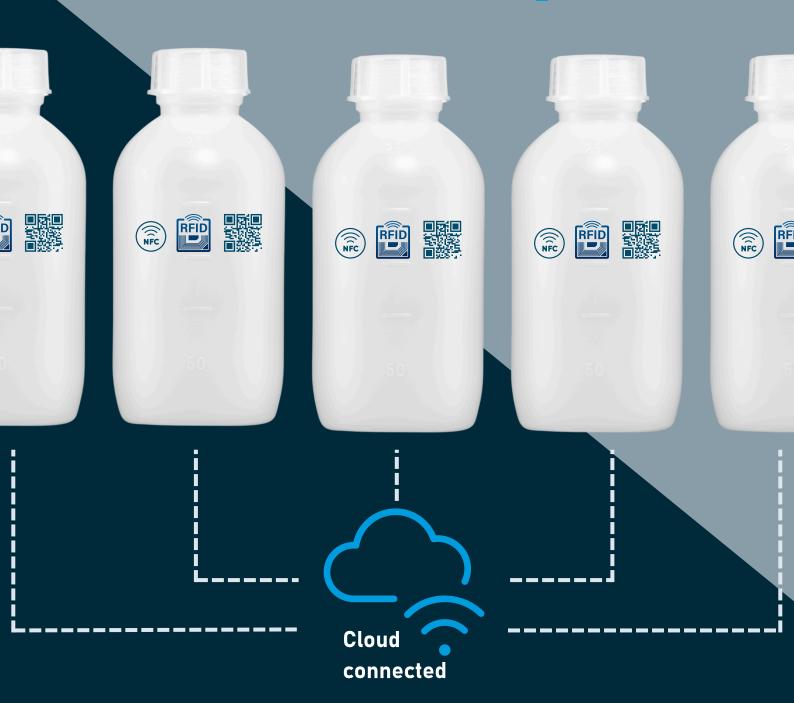


# SMART PACKAGING INFO SHEET

**EXPERTISE IN PLASTICS\_** 





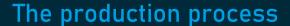
## The Smart Packaging Solution

The connection of sustainability and digitalization









The chip is inserted into the packaging in a tamper-proof manner during the production process, encased in material and fed directly into a cloud via a feeder - creating a unique identification number.

The QR code is also cloud-connected and can be found on the in-mold label or by laser.



## The advantages

- Automated inventory management
- Track & Trace along the supply chain
- Increased product engagement
- Flexibility & individualization in content management



## NFC or QR Code

#### QR Code

Application by laser or in-mold label Automated initialization in the cloud

## **NFC Chip**

Chip integration via in-mold label during the production process

Automated initialization in the cloud

Scan with your smartphone or a special scanner







## **Product Engagement**

- Customer interaction
- Special offers, incentives, communication campaigns
- Link to product information, documentation, websites, videos, apps and more



## Flexibility and customization

- · Linked data that can be adjusted in real time, e.g. updated product information after purchase or use
- Individual content per item



## (New) Data

- Passive chip (no data is stored on the chip)
- Customer insights
- Life-Cycle Data (EU law that prescribes reuse strategies and optimization of the product life cycle)



## RFID Chip



Chip integration via in-mold label during the production process
Automated initialization in the cloud
Scanning via handheld reader or gate infrastructure possible



Every RFID-chipped product has a UID in accordance with GS1 standards
Serialization possible in combination with QR or matrix codes



## **Inventory Management**

- Bulk reading up to entire pallets
- Individual tracking per item
- Support for return and deposit systems



### Track & Trace

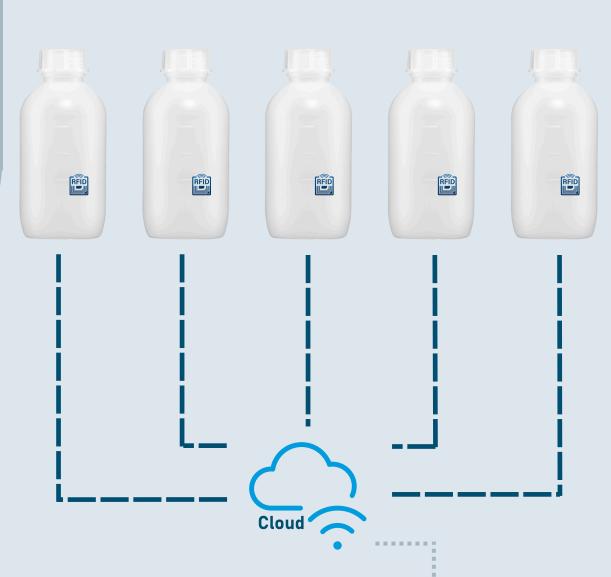
- Passive chip (no data is stored on the chip)
- Option for digital product passport
- Logistics Insights
- Life-Cycle Data (EU law that prescribes reuse strategies and the optimization the product life cycle)
- Statistics (e.g. reuse counter)
- Counterfeit protection with serialization and traceability



## Unique Identification Number - UID

The chips and QR codes are linked before use so that a precise identical ID is guaranteed and the information associated is always provided.





#### What is an UID?

The chip is fed directly into a cloud via a feeder during the production process - creating a unique identification number. Each product has a globally unique identification number.





## Functionality of the Smart Packaging Solution



#### Cloud Connected

The RFID chip is linked to the packaging in a tamper-proof manner during the production process using a patented process and stored in the cloud.



## Smart Packaging 4.0

A wide range of information, such as websites, PDFs, videos, as well as applications, can be stored on the chip and changed in real time.



## **Data Security**

The integrated chip is passive. No data is stored on the chip. Information is merely linked.



## Advantages of the smart packaging solution



## High security

for your customers through product authentication



Tracking and tracing of your products along the supply chain



#### Interaction

with your customers via smart packaging



## Flexibility

by adapting content in real time



## **Inventory Management**

