



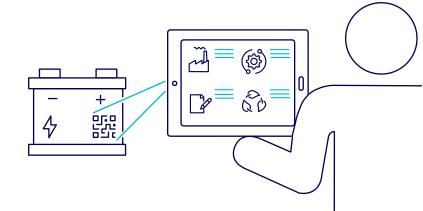
ECLASS as the solution for the Digital Product Passport (DPP)



What is a Digital Product Passport?

In a Digital Product Passport all relevant product information such as manufacturer, repair and disposal options should be recorded digitally and made transparently accessible to all stakeholders involved in the product life cycle via the DPP system. The structuring of this environmentally relevant data is to be carried out in a standardized, comparable format. In a study on the Digital Product Passport, the German Economic Institute (IW) recommends using the ECLASS Standard to set up a DPP.

As of 2027, the Battery Passport as the first Digital Product Passport will become mandatory for industrial and car batteries in the EU. Digital Product Passports for other product groups will follow.



ECLASS as the solution for the Digital Product Passport

With about 48,000 classes and 23,000 unique properties the ECLASS Standard already provides a manufacturer-independent and cross-industry solution to uniquely describe products. In addition, ECLASS is subject to continuous further development by experts from development, industry and trade so that it always meets current requirements.

Information for the Digital Product Passport can be mapped with ECLASS structural elements such as

- "Environmental Footprint"
- "General Battery and Manufacturer Information"
- "Circularity and Resource Efficiency"

in the <u>Asset Administration Shell (AAS)</u>. The Asset Administration Shell is an exchange format for data and bundles information about products along their entire life cycle in sub-models.



The DPP with ECLASS: Convincing arguments



Internationally established in 17 languages

Over 4,000 companies worldwide are already successfully using the ECLASS Standard for digital data exchange and across all borders.

With ECLASS 14.0, for the first time we provide users with full translations in 15 of our 17 available languages.



Manufacturer-independent and cross-industry

The ECLASS Standard for product descriptions can be used independently of manufacturers and industries. Different standards from industries such as electrical engineering, food, automotive or office supplies are developed by ECLASS into a uniform, cross-industry standard.



Investment-proof and standard-compliant

ECLASS complies with internationally recognized standards so that ECLASS users can rely on the quality and safety: The data model of the ECLASS Standard is based on ISO 13584 / IEC61360 / DIN 4000 / DIN 4001 / DIN 4002, part 1-7. Every structure element has a globally unique identifier (IRDI, ISO 29002).

In addition, the procedure for maintaining and further developing ECLASS is also standard-compliant (ISO 22274). The ECLASS Standard is suitable for data exchange in accordance with ISO 29002.





Open standard and continuous development

ECLASS is an open standard which constantly being further developed and can therefore always respond to changes on the market. Together with experts from development, industry and trade we elaborate a new release every year to keep the Standard up to date and to map all new requirements in ECLASS.

Anyone can submit a Change Request to extend or adapt the Standard – whether a member of ECLASS e.V, a user or an expert with an interest in the Standard.

Different exchange formats

1010	1010	1010
1010	010	1010
1010	1010	1010
1010	1010	1010
010	100	1010

ECLASS product descriptions can be exchanged directly via a Webservice as XML or JSON. The Digital Product Passport can be created in the data container of the AAS. This AAS is then mapped in ECLASS.

Mappable identification



Common identifications such as GTINs, DUNS, internal article numbers, identification links (IEC 61406) etc. can be easily mapped as product properties in the ECLASS Standard.