

We produce packaging for hazardous goods with the following UN certifications:

Material	Packaging type	UN certification
Steel	Containers	4A
		4AW
	Bulk packaging	50A
Aluminium	Containers	4B
		4BW
	Bulk packaging	50B
Plastic	Boxes	4H1
		4H2
EPP	Boxes	4H1
		4H2

We have a wide range of products in these fields. Talk to us – we are pleased to help you. Especially for our hazardous goods packaging we have our own certified in-house testing centre where we carry out legally required drop tests.

Packaging is tested both as prototype and serially-produced items in the appropriate test series, before being given the subsequent official UN certification.

Outside dimensions and inlet sizes of the packaging units are individually specified in accordance with your wishes and current legal requirements.

In addition to type approvals we are fully authorised to carry out 6(c) bonfire tests for hazardous goods packaging.

Paul Müller Transport- und Verpackungsmittel GmbH (transport and packaging Ltd.) is an independent company, based in the town of Balve, South Westphalia.

Industrial companies and well-known automotive manufacturers around the world place their trust in transport and packaging solutions supplied by Paul Müller.

For a good reason: we are specialised in standard and special load carriers, hazardous goods containers, tigger trains, plastic trays and moulded components, as well as wooden packaging, which perform solidly in a wide variety of application situations.

More information about our hazardous goods containers is available at: [www.paulmueller.de](http://www.paulmueller.de)



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Tigger Train Systems



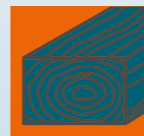
Hazardous Goods Containers



Plastic Trays and Moulded Parts



Standard/Special Steel Racks



Wooden Packaging

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# Hazardous Goods Containers



**PAUL MÜLLER**  
 macht's transportabel



*Hazardous goods container with drawers*



*Hazardous goods container made of EPP*



*Hazardous goods container with hinged layers*



*Hazardous goods container for lithium modules*



*Hazardous goods container lithium-ion batteries*



*Hazardous goods container for head airbags*



*Hazardous goods container for pretensioners*



*Airbag module after 6(c) bonfire test*

### Competence and reliability

Airbags, pretensioners and batteries for electric vehicles are dangerous goods that need to be shipped in special hazardous goods packaging. Thanks to our many years of cooperation with well-known automobile manufacturers, we are your ideal partner in this area as well.

We are holders of type approval certificates for hazardous goods containers made of steel, aluminium and plastics in a great variety of dimensions and designs.

The drop tests and 6(c) bonfire tests stipulated by law are also carried out on our premises to comply with all regulations imposed by the Carriage of Hazardous Goods Act (GGBefG).

Have you got any further questions? Our Corporate Risk Prevention Officer will be glad to advise you.

### WE HOLD TYPE APPROVAL CERTIFICATES FOR THE FOLLOWING DIMENSIONS:

- Hazardous goods containers made of steel/aluminium from 1,000 x 600 x 100 mm to 2,400 x 1,900 x 1,000 mm
- Hazardous goods containers made of injection-moulded plastics + EPP from 600 x 370 x 100 mm to 1,000 x 600 x 250 mm

## Packaging for dangerous goods Your advantage: Our experience

Our packagings for dangerous goods have established themselves primarily in companies of the automotive industry. Customised, efficient and safe - with these attributes, we have emerged as a leading manufacturer in the field of hazardous goods transport packaging. Especially where steel and plastic composites are concerned, we are pioneers of the industry.

At our facilities in Balve and Nordhausen, we work with a wide range of different materials in various processes. Drawing on more than 50 years of experience and utilising the know-how of our own product design, mould-making and prototyping departments. This enables us to optimise our coordination with customers' needs and wishes already at an early project stage, save valuable time and ensure that the necessary safety standards are met.



# You have the battery? We can supply the right packaging.

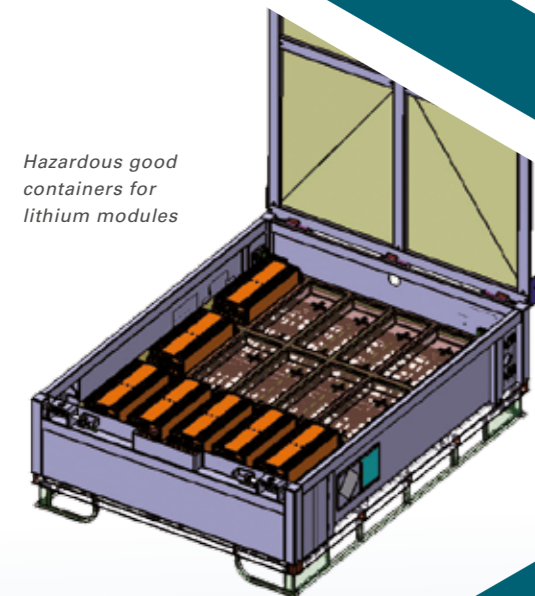
Safe, powerful, and individual – we are the right people to talk to when you are looking for packaging solutions for prototype batteries and battery components.

Your idea has become a prototype? No problem, we will produce packaging which is especially tailored to your battery prototypes.

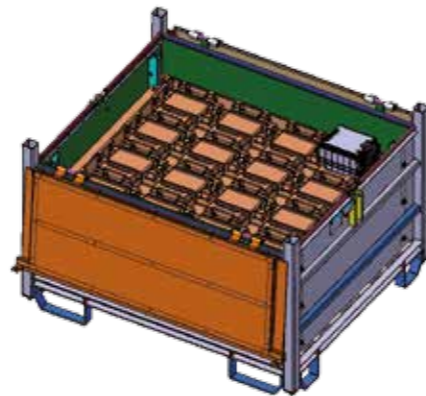
You can rely on our expertise in questions of battery component transport. We design and produce packaging which is optimised for your battery cell and module products.

Legally required drop tests are of course included in our range of services.

Everything from one source – your carefree full service package!

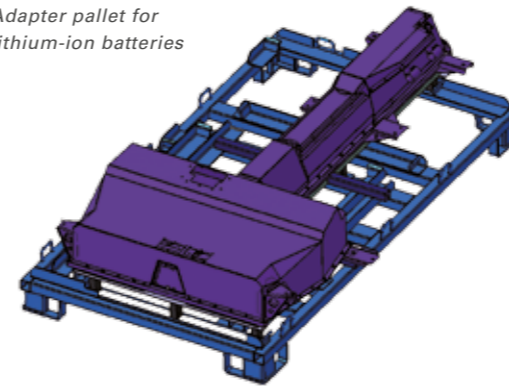


*Hazardous good containers for lithium modules*



*Hazardous good containers for lithium modules*

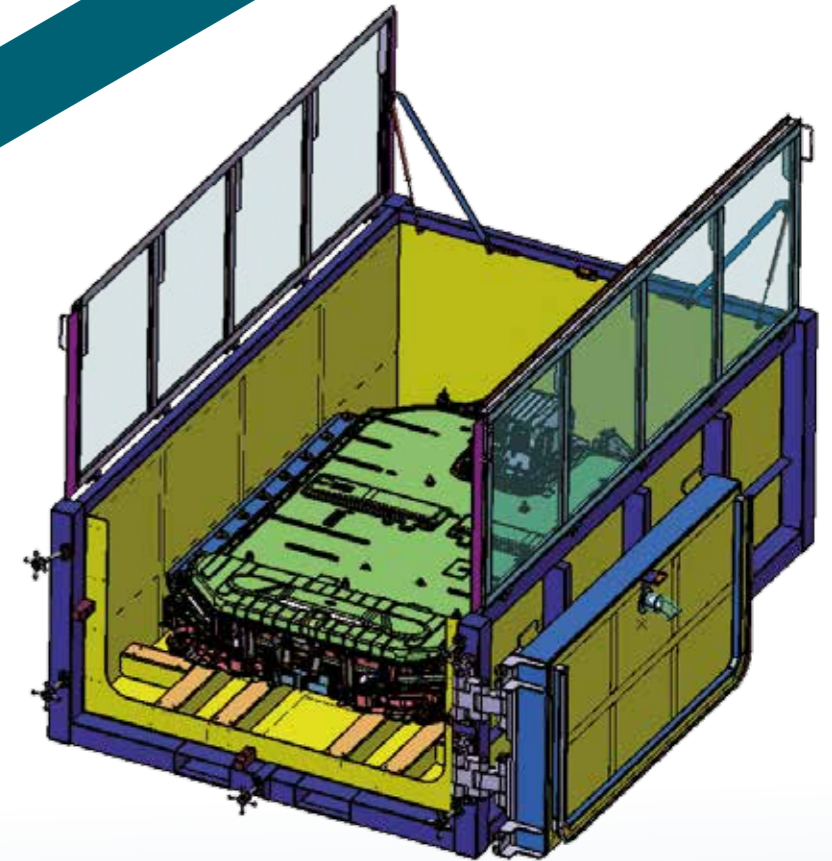
*Adapter pallet for lithium-ion batteries*



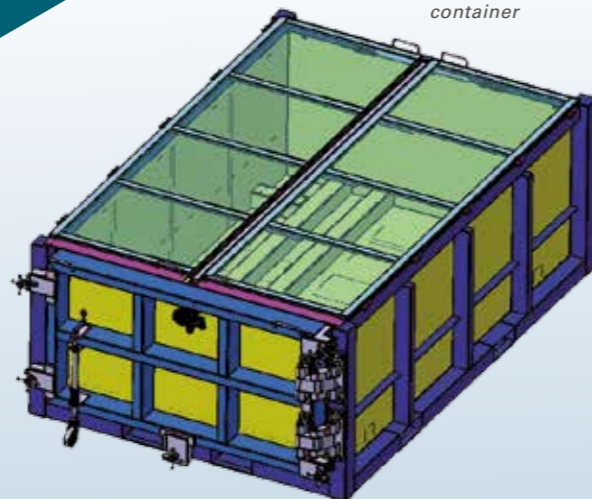
*Hazardous good containers for lithium-ion batteries*



*Emergency container with battery unit*



*Emergency container*



## Your lithium battery is burning? We have the safe solution!

Our emergency containers offer safety and environmental protection when a battery overheats. The container enables controlled reaction to a dangerously overheating battery.

The easily-opened front flap enables fast container loading in an emergency situation. Continued water supply provides the necessary cooling. Contaminated water can be disposed of by means of a dedicated drainage outlet.

We adjust the size of the container to your requirements, orienting on the dimensions on the battery size.

# Innovative packaging and logistics solutions:

## PAUL MÜLLER

Whether special constructions for your hazardous goods, emergency containers or transport packaging: We can supply you with individual and safe transport and logistics solutions.

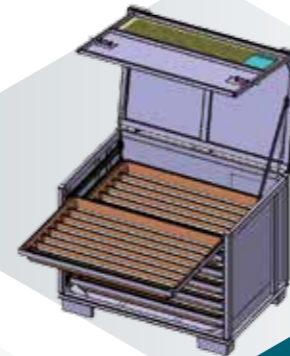
We orient our work on your work specification in everything that we do. This way, we develop innovative transport and logistics solutions, exactly coordinated to your specific requirements.

Logistics are our business – today and in future!

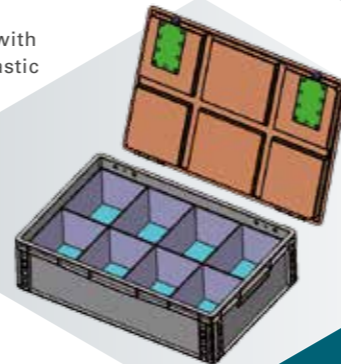
**HAZARDOUS GOODS CONTAINER**  
for airbag modules,  
with removable  
plastic boxes



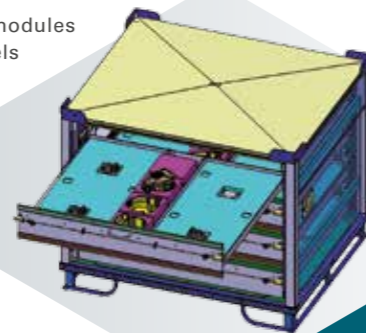
**HAZARDOUS GOODS CONTAINER** for airbag modules, with pull-out inlays



**HAZARDOUS GOODS CONTAINER**  
made of EPP, with  
corrugated plastic



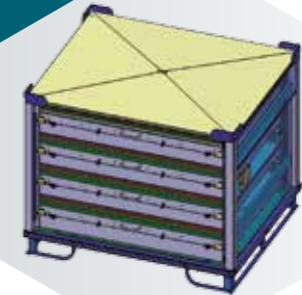
**HAZARDOUS GOODS CONTAINER**  
for driver airbag modules  
and steering wheels



**HAZARDOUS GOODS CONTAINER**  
for driver airbag modules



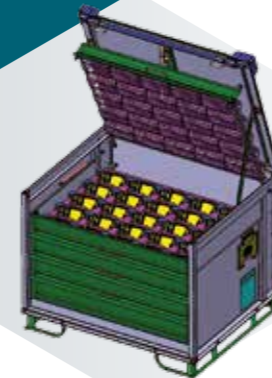
**HAZARDOUS GOODS CONTAINER**  
with drawers for airbag modules



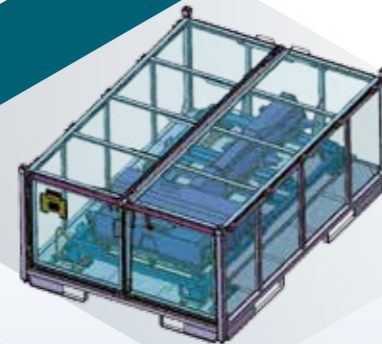
**HAZARDOUS GOODS CONTAINER** made of EPP for pretensioners



**HAZARDOUS GOODS CONTAINER**  
with hinged trays for  
airbag modules



**HAZARDOUS GOODS CONTAINER**  
for lithium-ion batteries



**EMERGENCY CONTAINER**

