



BATEGU EN 45545-COMPLIANT ELASTOMER MATERIALS

With BTG®9713 and BTG®9559 it is possible since 2011 to manufacture rubber/metal components or anti-vibration components (M1 components) that meet the mechanical and dynamic properties required for use in bogies and in addition the fire safety requirements of EN 45545. The materials were developed specifically for use in railway vehicles, in particular for use in bogies and can curb the life-threatening effects in case of fire and other severe negative health effects for people without having to compromise on the mechanical and dynamic properties and the comfort and the error-free service life expected by the vehicle manufacturers and carriers.

The materials can also be easily processed with existing vulcanisation tools to form anti-vibration components in the usual dimensions for existing spaces. This means that OEM's save on elaborate changes to proven technical solutions and vehicle operators can easily retrofit existing vehicles to make them EN 45545-compliant.

The materials are available from 40 to 85 shore A, compliant to R9 with a hazard level of 2 or 3. Which material is best suitable for which anti-vibration component, is first and foremost dependent on the construction of the component, as well as the spring deflection to be achieved (the following is valid: spring deflection before shore hardness).

BATEGU EN 45545-compliant elastomer materials according to shore hardness:					
Shore Hardness A	40*	45	50	55	60
Classification	HL 2	HL 2	HL 2	HL 2	HL 2
Shore Hardness A	65	70	75	80	85
Classification	HL 3	HL 3	HL 3	HL 3	HL 3
* in case of material combination with BTG®9713, 40 shore HL 3 can be achieved.					

MATERIAL SPECIFICATION EN 45545-2

Material/requirement	BTG®9713	BTG®9713	BTG®9559 A	BTG®9559 B-Z ²
Requirements for flexible rubber/metal components	R 8 ¹	R9	R9	R9
Classification	HL 2	HL 3	HL 2	HL 2 / HL 3
¹ R9 corresponds to the current set of requirements of the EN 45545-2 (previously R8 according to prEN 45545-2 but with 50 kW/m2 and 20 minutes).				
² The technical details of the individual materials BTG®9559 are available upon request.				

In the download area of the BATEGU website different EN 45545 inspection certificates are available under **Certificates**. Please keep in mind that these are only copies to be viewed. The originals will be provided and labelled as such – with the first delivery of components.

For more information, please contact our Application Engineering department.