



THE SPECIALISTS FOR
THERMOPLASTICS & ELASTOMERS

BADA COMPOUNDS FOR RAILWAY APPLICATIONS



Badamid UL A703 GF20 FR HF:

High-tensile, halogen-free, flame retardant PA66, reinforced with glass fibres

Badamid BA70 FR HF HH:

PA66/6 blend for switches, clamps, and housings with snap-fits

Badamid LC70 FR HF:

PA66/6 copolymer for switches, clamps, and housings with snap-fits

Badamid C70 FR HF HH:

Successor of LC70 FR HF with even higher thermal capacity

MOBILITY WITH BADA – CERTIFIED COMPOUNDS FOR THE EUROPEAN RAIL TRAFFIC



The importance of public transport by train, metro or tram is becoming more and more important due to continuously growing cities worldwide. As a consequence, demands on plastics for railway applications are increasing, too. Great importance is attached to maximum possible fire protection owing to the increasing number of passengers.

The harmonised standard **EN 45545-2** defines different hazard levels depending on the requirements on and hazard potential of the respective application. **Hazard level 3 (HL3)** represents the highest performance category. Supply lines and high voltage components are subject to risk phrase **R22** (indoors) and **R23** (outside). Here, the use of halogen-free, fire retardant polyamides has become mostly prevalent.

Bada AG has got a broad portfolio of reinforced and unreinforced polyamides specifically adapted for the railway sector that all fully meet the **requirements of HL3**. These materials are future-proof as they significantly fall below the required limit values even if the legislator will further tighten them.

Our Application Technology will be happy to provide consultancy. Do challenge us, we are looking forward to assisting you!





THE SPECIALISTS FOR
THERMOPLASTICS & ELASTOMERS

BADA COMPOUNDS FOR RAILWAY APPLICATIONS

Requirements acc. to EN 45545-2	Smoke density	Oxygen index	Toxicity
	DS _{max} . [-]	OI [%]	CIT _{NLP} [-]
Limit value for HL3	< 150	> 32	< 0.75
Badamid UL A703 GF20 FR HF	39	40.0	0.45
Badamid C70 FR HF HH	103	36.0	0.54
Badamid LC70 FR HF	43	36.2	0.41
Badamid BA70 FR HF HH	25	34.0	0.53

Klassifizierungsergebnis Classification result

Das geprüfte Produkt erfüllt die folgenden Anforderungen der EN 45545-2:
The tested product meets the following requirements of EN 45545-2:

Anforderungssatz Requirement set	Gefährdungsstufe Hazard level
R22, R23	HL1, HL2, HL3

i.v. Bulk
16.09.2015 12:30

Dr. Julian Bulk
(Laborleiter Brandtechnologie)
(Laboratory Manager of Fire Technology Department)



i.v. Richter
16.09.2015 13:33

Karl-Heinz Richter
(Sachbearbeiter Brandtechnologie)
(Fire Technology Department, Customer Support)

Customized modifications are available on request.
Please contact our Application Technology Department!



BADAMID®
PA6, PA6.6, PA6.6/6

BADAMID®
PA6/6T, PPA, PA4.6, PA10T

BADAMID®
PA12, PA612, PA610

BADATECH HT®
HOCHLEISTUNGS-COMPOUNDS

BADATRON®
PPS

BADAFLEX®
TPE-S (SBS, SEBS)

BADAFLEX®
TPE-E, TPU

BADAPRENE®
TPV (EPDM/PP)

BADADUR®
PBT, BLENDS

BADALAC®
ABS-SPEZIALITÄTEN, BLENDS

BADAFORM®
POM

BADALON®
PC-SPEZIALITÄTEN, BLENDS

BADAPROP®
PP-SPEZIALITÄTEN, BLENDS



Bada AG Deutschland
77815 Bühl/Baden
Tel. +49 (0)72 23-940 77-0
Fax +49 (0)72 23-940 77-77
E-Mail: info@bada.de

Bada Hispanaplast S.A. España
22006 Huesca
Tel. +34 974-23 97 74
Fax +34 974-24 39 69
E-Mail: info@bada.com.es

www.bada.de