DragonFlex
a Compounds AG brand

Compounds
rubber solutions



DRAGONFLEX FLAME RETARDANT RUBBER COMPOUNDS

SWISS MADE

FLAME RETARDANT RUBBER COMPOUNDS

Certified rubber compounds for Railway application

EPDM DRAGONFLEX

We offer newly developed compounds with NR and EPDM base, which can be used inside and outside of rail vehicles as well as in civil engineering. The DragonFlex compounds have convincing dynamic-mechanical behaviour, tear resistance, compression set and the required fire protection properties. If it comes into contact with fire, there are hardly any combustion gases and minimal toxicity. The fire protection mixture is certified according to R22-24 and achieves HL3.



Applications:

- window seals
- door seals
- armrests
- other rubber products include indoor area (except floor coverings)
- suitable for other norms, such as building standards: EN 13501 or DIN 4102



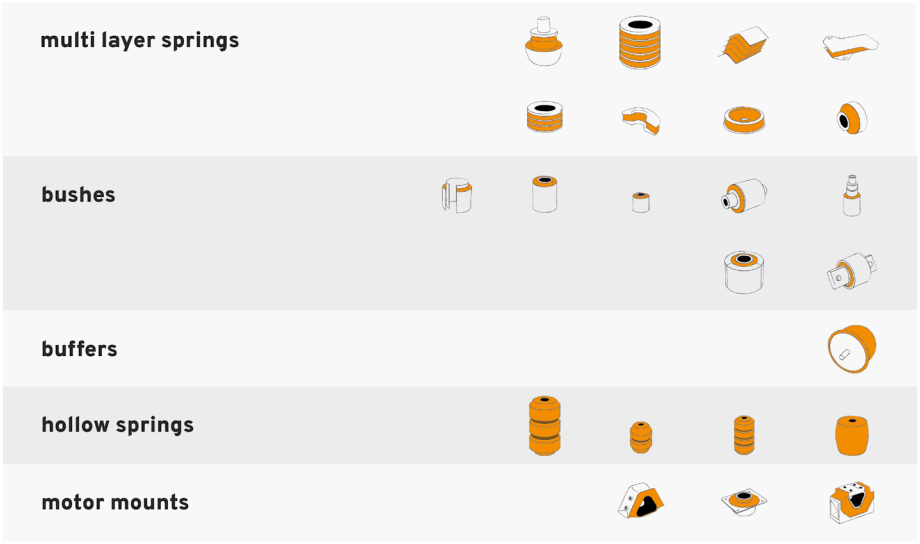
Properties

- good processing for molded parts, profiles and seals
- colour range available
- proven product range
- flame retardant
- maintenance-free
- approved according to: EN 45545,
- R22-23-24: HL3

OUR LATEST
MIXTURE DEVELOPMENTS:
https://www.compounds.ch/en/dragonflex-en.html

NR DRAGONFLEX

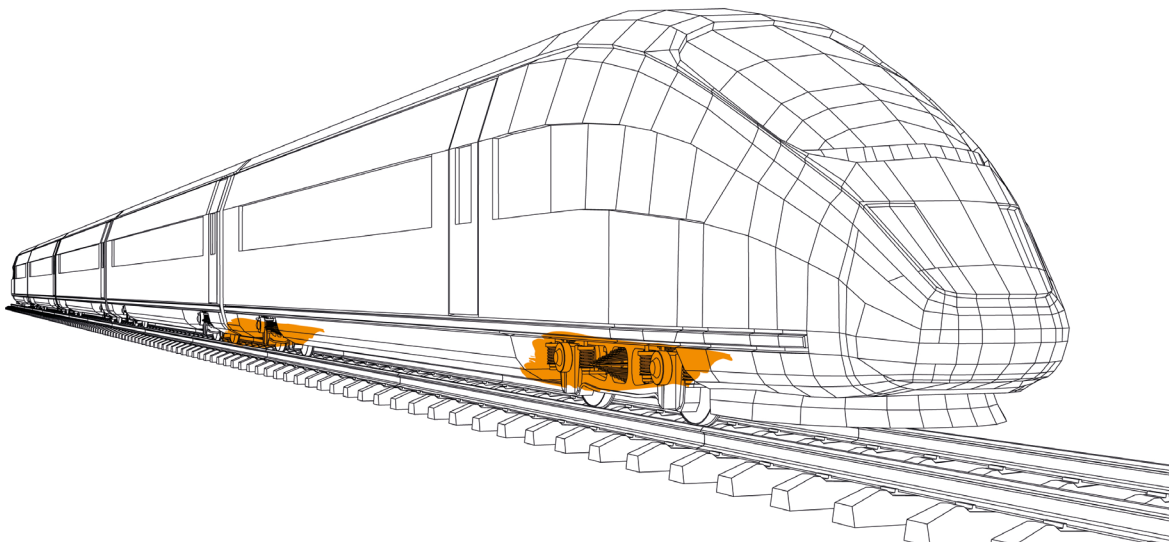
We offer a special natural rubber compound with the best mechanical and dynamic properties, it meets the requirements of EN45545: R9, HL2. Particularly suitable for the manufacture of vibration control components. The NR mixture is available in various hardnesses.



Properties

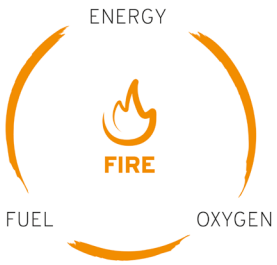
- good processability
- further colours available
- optimised mechanical properties

	dynamic-mechanic properties	tear resistance	compression set	weather and ozone resistance	flame protection properties
Standard NR	●	●	●	◔	◔
NR with Dragonflex	◕	◕	◕	◔	◕
Standard EPDM	◔	◔	◕	◕	◔
EPDM with Dragonflex	◔	◔	◔	◕	●

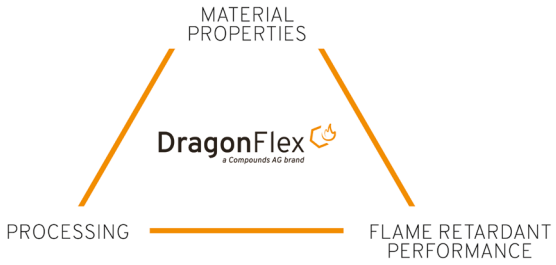


» CHALLENGE TO CERTIFICATION

Fire protection in rail vehicles plays an important role. The EN 45545 standard was developed for this purpose. The challenge with rubber is to guarantee the processability and function in the component in addition to the standard requirements.



Fire arises under certain conditions.



In addition to fire protection, DragonFlex offers acceptable processing and is ideally suited for the end application.

		OXYGEN CONTENT	HEAT RELEASE	SMOKE	TOXICITY	TOXICITY	CRITICAL HEAT FLUX
	POSSIBLE APPLICATIONS	OI	MAHRE	Ds max	CITg	CITnIp	CHF
R9	suspension parts made of rubber, wheels		✓	✓	✓		
R10	floor coverings		✓	✓	✓		✓
R22	sealings and hoses interior	✓		✓		✓	
R23	sealings and hoses exterior	✓		✓		✓	
R24	isolated from combustible material	✓					

» **Relevant classifications according to EN 45545-2**
R-classes - define the test spectrum for the application of the product

HAZARD LEVEL MATRIX		DESIGN CATEGORY			
Operation Category		Standard vehicles	Automatic train with no emergency staff on board	Double decker vehicle	Sleeping and couchette vehicles
OC-1	above ground with good evakuation	**HL1**	**HL1**	**HL1**	**HL2**
OC-2	underground/tunnels with good evacuation	**HL2**	**HL2**	**HL2**	**HL2**
OC-3	underground/tunnels with limited evacuation	**HL2**	**HL2**	**HL2**	**HL3**
OC-4	underground/tunnels without evacuation	**HL3**	**HL3**	**HL3**	**HL3**



» **Classification of the danger level according to EN 45545-2**
danger level - level of flame retardancy

» Compounds AG
Barzloostrasse 1
8330 Pfäffikon ZH

Phone +41 44 953 34 00
Fax +41 44 953 34 01

info@compounds.ch
www.compounds.ch