

# **TEGO® Addibit Additives for Asphalt and Bitumen Applications**



# TEGO® ADDIBIT ADDITIVES

## Emulsifiers

PRODUCT NAME	Properties		Surfactant Classification			Applications (CRS/CMS/CSS)						
	PHYSICAL FORM	ACTIVE CONTENT	ANIONIC	CATIONIC	NON-IONIC	CHIP SEAL	MIXING GRADE	TACK COAT	BASE STABILIZATION	PRIME COAT	MICRO-EMULSION	RECYCLING
TEGO® Addibit DF	liquid	30%	•	•	•			•	•	•		
TEGO® Addibit EK 50	liquid	38%	•	•	•	•	•	•				
TEGO® Addibit EM 20	liquid	100%		•				•				
TEGO® Addibit F4 HB	flaky	100%		•		•	•					
TEGO® Addibit F4 HB SZ 10	flaky	100%		•		•	•					
TEGO® Addibit L 300 N	liquid	100%		•		•	•					
TEGO® Addibit PKF	liquid	80%		•		•			•		•	•

CRS = Cationic Rapid Setting CMS = Cationic Medium Setting CSS = Cationic Stable Setting

## Antistripping Agents

PRODUCT NAME	PHYSICAL FORM	ACTIVE CONTENT	HEATSTABILITY	REMARK
TEGO® Addibit F4 HB	flaky	100%	up to 280 °C	Strongly reduces wheel tracking
TEGO® Addibit L 300 N	liquid	100%	up to 180 °C	Improved temperature stability

## Foam Bitumen

PRODUCT NAME	APPLICATION	ACTIVE CONTENT	PHYSICAL FORM	REMARK
TEGO® Addibit FS 725 A	Foamed bitumen	40%	liquid	Suitable for all common bitumen grades

## Performance Additives

PRODUCT NAME	APPLICATION	PHYSICAL FORM	REMARK
TEGO® Antifoam 1488	Antifoam	emulsion	Based on organomodified siloxanes
TEGO® Antifoam AS 10	Antifoam	emulsion	Based on silicone derivates, mainly for use in cationic and anionic emulsions
TEGO® Addibit EM 20	Co-Emulsifier	liquid	For solvent free bitumen emulsions
TEGO® Rheo 8510	Viscosity Modifier	liquid	For use in cationic emulsion
TEGO Sorb® A 30	Odor Absorber	liquid	For bitumen

## Listing Status

PRODUCT NAME	EINECS	TSCA	DSL	NDSL	ENCS	AICS	ECL	PICCS	CHINA
TEGO® Addibit DF	+	+	-	+	+	+	-	-	+
TEGO® Addibit EK 50	+	+	+	-	+	+	+	+	+
TEGO® Addibit EM 20	+	+	+	-	+	+	+	+	+
TEGO® Addibit F4 HB	+	+	-	+	-	+	-	-	+
TEGO® Addibit F4 HB SZ 10	+	+	-	+	-	+	-	-	+
TEGO® Addibit FS 725 A	+	+	+	-	+	-	-	+	+
TEGO® Addibit L 300 N	+	+	+	-	+	+	-	+	+
TEGO® Addibit PKF	+	+	-	+	-	-	-	-	+
TEGO® Rheo 8510	+	+	-	+	+	+	+	-	+
TEGO® Antifoam 1488	+	+	+	-	+	+	+	+	+
TEGO® Antifoam AS 10	+	+	+	-	+	+	+	+	+
TEGO Sorb® A 30	+	+	-	+	+	+	+	+	+

+ = listed - = not listed

# VESTENAMER® COMPATIBILIZER

## Properties

PRODUCT NAME	PHYSICAL FORM	ACTIVE CONTENT	MIXING GRADE	BASE STABILIZATION	REMARK
VESTENAMER® 8012	Pellets	100 %	•	•	Compatibilizer for use in rubber modified bitumen*

\* Alternative: GTR bitumen or ground tire rubber bitumen

## Listing Status

PRODUCT NAME	EINECS	TSCA	DSL	NDSL	ENCS	AICS	ECL	PICCS	CHINA
VESTENAMER® 8012	+	+	+	-	-	+	-	+	+

+ = listed - = not listed

It's long been known that ground tire rubber powder (so-called GTR) can be used to increase the durability and performance of asphalt pavements. However rubber powder as sole modifier

behaves like a non-reactive additive in bitumen and leads to a sticky asphalt mixture which is difficult to process. On the other hand the polyoctenamer VESTENAMER® allows an interaction

between crumb rubber and bituminous binders and provides hereby a uniform, barely sticky, rubber containing asphalt compound.



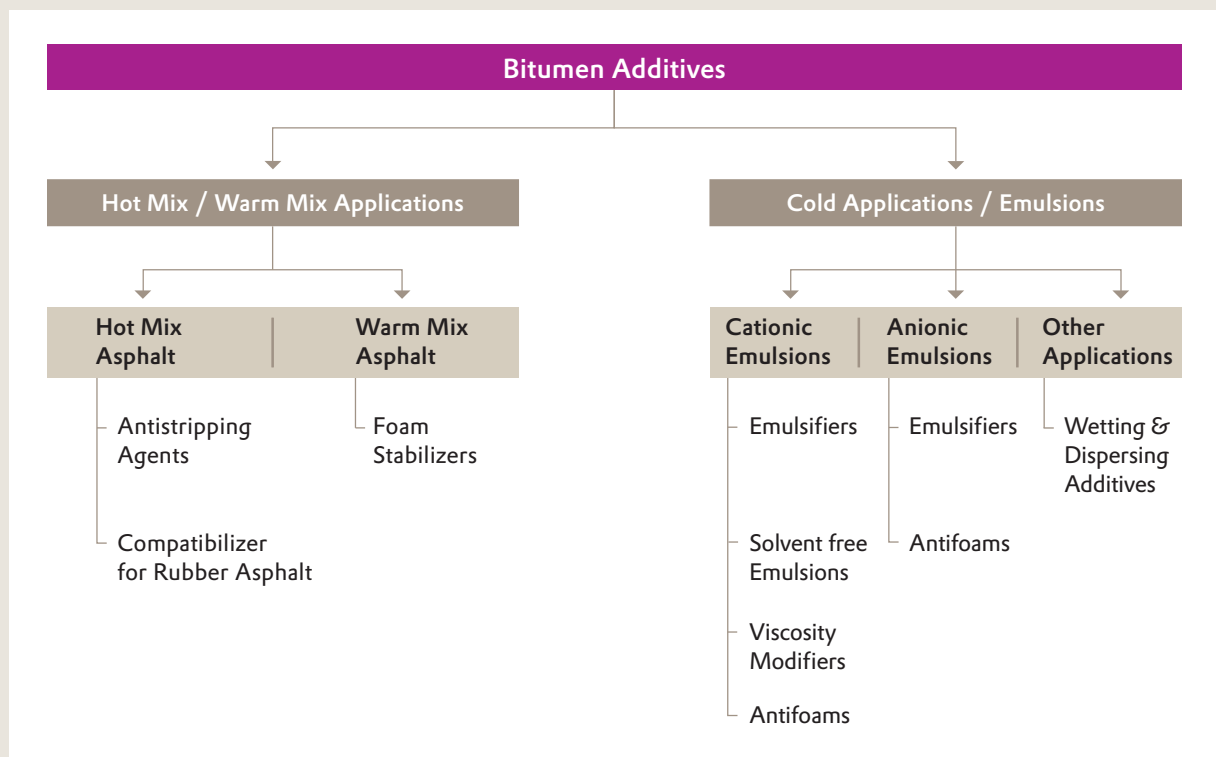
# ADDITIVES FOR ASPHALT AND BITUMEN APPLICATIONS

Evonik is providing a broad range of technologies to serve the road construction industry. TEGO® Addibit additives provide solutions for today's requirements such as durability, reduction of emissions and energy consumption, and thus support sustainable road construction and maintenance.

TEGO® Addibit antistripping agents for hot asphalt are characterized by excellent antistripping and wetting properties and high temperature stability. Consequently they allow a significant reduction of amine emissions during asphalt production and processing.

TEGO® Addibit stabilizers for foamed bitumen improve both the wetting of the rock grains and the foam stability and processability especially of recycling asphalt. Due to the low processing temperature, energy consumption, and CO<sub>2</sub> emissions are significantly reduced compared to hot asphalt.

TEGO® Addibit emulsifiers were specifically developed for the modification of bitumen and its further processing for the production of bitumen emulsions.



**Europe | Middle East | Africa**

**Evonik Operations GmbH**  
Goldschmidtstraße 100  
45127 Essen  
Germany  
Phone +49 201 173-2665  
Fax +49 201 173-1990  
[www.evonik.com](http://www.evonik.com)

**Asia | Pacific**

**Evonik Specialty Chemicals Co., Ltd.**  
55, Chundong Road  
Xinzhuang Industry Park  
Shanghai, 201108  
PR China  
Phone +86 21 6119-1125  
Fax +86 21 6119-1406

**The Americas**

**Evonik Corporation**  
P.O. Box 34628  
Richmond, VA 23234  
USA  
Phone +1 804 727-0700  
Fax +1 804 727-0855

This information and any recommendations, technical or otherwise, are presented in good faith and believed to be correct as of the date prepared. Recipients of this information and recommendations must make their own determination as to its suitability for their purposes. In no event shall Evonik assume liability for damages or losses of any kind or nature that result from the use of or reliance upon this information and recommendations. EVONIK EXPRESSLY DISCLAIMS ANY REPRESENTATIONS AND WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, AS TO THE ACCURACY, COMPLETENESS, NON-INFRINGEMENT, MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE (EVEN IF EVONIK IS AWARE OF SUCH PURPOSE) WITH RESPECT TO ANY INFORMATION AND RECOMMENDATIONS PROVIDED. Reference to any trade names used by other companies is neither a recommendation nor an endorsement of the corresponding product, and does not imply that similar products could not be used. Evonik reserves the right to make any changes to the information and/or recommendations at any time, without prior or subsequent notice.



[www.evonik.com/asphalt](http://www.evonik.com/asphalt)

Inv.-Nr.: 43-2020