# Direction du laboratoire des chaussées

# **EG-10**

# Grained

# asphalt

## mix

Autoroute 30, Saint-Constant, 1993



### Introduction

This asphalt mix was developed based on research targeting high-performance asphalt mixes at the ministère des Transports du Québec since 1990. EG-10 is a 0/10 asphalt mix whose particle-size distribution is lower than the maximum density curve. It was designed to be applied as a thin surface course on both old and new pavement.

Thickness: 40 to 60 mm.

## Area of application

This type of asphalt mix is especially suited to highways in rural areas with high-speed traffic. The considerable macrotexture of the surface makes it safer for travel in rain and freezing rain.

#### Qualities

Given its particle-size distribution, this asphalt mix is highly resistant to segregation and can be laid easily. Its resistance to rutting is average to high based on the testing methods used. Since the asphalt film is thicker than 8 micrometres, resistance to stripping is high, ensuring longer service life.

## Composition

EG-10 calls for high-quality aggregates that are fully cracked, clean and particularly resistant to wear.

Only a polymer binder of performance grade PG 64-34 must be used to manufacture EG-10.



## Laboratory characteristics

#### Aggregate classes required

EG-10 calls for filler and at least two classes of aggregate with different mesh apertures.

#### Typical physical characteristics

Binder content: 5.5% Asphalt film: > 8 µm

On-road compacity: 94-96% Resistance to rutting: < 20% at 3000 cycles on a specimen 50 mm thick

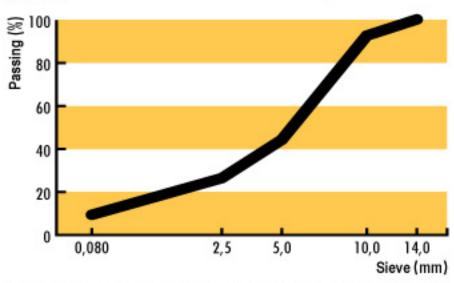
Voids at 10 gyrations

(gyratory compactor): ≥ 11%

Voids at 80 gyrations

(gyratory compactor): > 4-7% Voids at 200 gyrations: ≥ 2%

Typical	partic	e-size	distri	bution	curve
(power 0.	.45)				



Olava (man)	Passing (%)			
Sieve (mm)	minimum	maximum		
14	100	100		
10	90	100		
5	40	50		
0,080	4	10		



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