



THE CHEMICAL DIVISION OF COLAS

# TLC

## Product Information

TLC is a mix of fatty imidazoline derivatives and amidoamines designed for emulsions used in cold micro asphalt.

## Storage & Handling (refer to Chemoran guide)

TLC must be protected from exposure to water. When mixed with water, a chemical reaction can occur which leads to a reduction in some of the emulsifier's properties.

Water will sink to the bottom of the emulsifier container and form a clouded viscous layer. The clear unaffected emulsifier should be carefully decanted off without disturbing this layer and used as soon as possible.

## Formulation Example

(refer to CST Technical Note N°115)

Application	Micro surfacing
Bitumen Type & Dosage	60% naphthenic
TLC Dosage	7-16 kg/t
Aqueous Phase pH	2.0-2.5

## Table of Parameters

Characteristics	Methods	Specification	Typical Values
Physical state at 20°C / 68°F	Visual test	Liquid	-
Alkalinity index (mgHCl/g)	MOPCST PC-006	>220	235
Flash point, closed cup	EN 22719	>100°C / 212°F	-
Cloud point	CHEM 003	-	<0°C / 32°F

TLC must be protected from long-term exposure to atmospheric moisture. This takes place slowly on the emulsifier surface exposed to moist air. It is identified as a viscous clear skin which may lead to a reduction of product performance.

Bulk storage tanks are more likely to experience this due to long storage periods and open vents. Smaller containers with small amounts of emulsifiers can be damaged on long storage especially if they are not fully sealed.

TLC must be protected from frost. Continued cold weather storage can lead to major increase in the viscosity and some precipitation may take place at temperatures below the cloud point. If this occurs TLC should be heated or agitated thoroughly to insure a homogeneous mixture before use.

## Packing

Drum of 185kg /  
IBC / Tote of 910kg (2006 US lbs)

Temp.	Density		Viscosity
	(g/cm <sup>3</sup> )	(lb/gal)	
°F/°C			(mPa.s)
50/10	0.952	7.947	722
68/20	0.947	7.905	330
86/30	0.943	7.872	169
104/40	0.938	7.828	92
122/50	0.933	7.786	51