



THE CHEMICAL DIVISION OF COLAS

TNB

Product Information

TNB, is a mix of fatty imidazoline derivates and amidoamines designed for fast-breaking emulsions with intermediate viscosity, can be used with both naphthenic and paraffinic bitumen.

Storage & Handling (refer to Chemoran guide)

TNB 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.

TNB 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.

Formulation Example (refer to CST Technical Note N°129)

Application	Bitumen Type & Dosage	TNB Dosage	Aqueous Phase pH
Surface dressing	69% naphthenic	2.0 kg/t	2.0
Surface dressing	69% paraffinic	1.6 kg/t	2.5

Table of Parameters

Characteristics	Methods	Specification	Typical Values
Physical state at 20°C	Visual test	Liquid	-
Alkalinity index (mgHCl/g)	MOPCST PC-006	>150	170
Flash point, closed cup (°C)	EN 22719	>100	-
Cloud point	CHEM 003	-	<5°C

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.

TNB 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 TNB should be heated or agitated thoroughly to insure a homogeneous mixture before use.

Packing

Drum of 190kg / IBC of 900kg

Temp.	Density	Viscosity
°C	(g/cm ³)	(mPa.s)
10	0.926	410
20	0.92	220
30	0.914	125
40	0.908	75
50	0.902	40