

## Additives for warm mix asphalt DAD-TA

### Description

Preparation «DAD-TA» («DAD-TA2», «DAD-TA2K») is a special energy-saving (temperature-reducing) additive, which allows to ensure workability and compacting of asphalt concrete mix with required physical and mechanical performance under adverse weather conditions.

Allows to reduce the temperature of preparation and laying of ACM (asphalt concrete mixes) for 30 – 50 ° C without loss of quality

It is used in the manufacture of warm asphalt concrete of all types, including SMA (stone mastic asphalt) according to GOST R 58831-2020.

### Dosage

	Concentration input	Special feature
<b>DAD-TA</b>	<b>0,3%</b> (0,2-0,5%)	Premium class, reduced consumption, cationic surfactant like amines
<b>DAD-TA2</b>	<b>0,6%</b> (0,4-0,8%)	Economy class, amphoteric surfactant type
<b>DAD-TA2K</b>	<b>0,5%</b> (0,3-0,7%)	Economy class, cationic surfactants like amines



### Main Advantages

#### Laying in cold weather

Sealing enhancement is especially important in cold weather conditions at the beginning and end of the laying season or during laying at night time. Warm asphalt concrete mixes can be laid at the ambient temperature of up to minus 10°C.

#### Extending range of mix transportation

Owing to the fact that the additive provides the mix workability and allows to achieve higher density even at low temperatures – the problems connected with long distance transportation are reduced.

#### High active adhesion

Lower temperature of mixing, which has become possible with application of technologies of warm mixes, can lead to the presence of some residual moisture in the asphalt concrete mix, which can prevent full coating of stone material, or in the future can lead to asphalt destruction under the influence of moisture. Active adhesion property acquired by bitumen due to the modification by additive, will allow to extrude water from the surface of stone material particles of modified asphalt concrete mix, which will ensure not only coating of stone material, but also formation of rigid chemical adherence (adhesion) between stone material and bitumen, which will be resistant to exposure to water. This excludes application of additional adhesion agents.

#### Reduction of asphalt concrete mixing plant energy consumption

Due to decrease of operating temperatures in the process of manufacturing of warm mix, fuel consumption used by the asphalt concrete mixing plant is reduced, which leads to significant energy saving.

#### Decrease of hazardous emissions

Due to decrease of operating temperatures during warm mix laying, carbon oxide (CO<sub>2</sub>) and bituminous vapors emissions are reduced, which actually excludes hazardous emissions and odours.

### Specifications

	DAD-TA	DAD-TA2	DAD-TA2K
Mass fraction of water and highly volatile substances not exceeding	0,5% mass	1% mass	1% mass
Dynamic viscosity at 25°C, cP, not more	2500	1500	2000
Open-cup flash-point at least	224°C		
Binder adhesion to the aggregate of the mixture at least		4 - 5 points	

**Guaranteed storage life** is 2 year after manufacturing.

**Package** - metal barrels with volume of 216l or 52l and polymer containers with capacity of 1m<sup>3</sup>.