

Odor Free Antistripping Technology

Zydex
Innovating for Sustainability



ZycoTherm-AS

A chemically reactive & odor free antistripping technology that forms a permanent chemical bond between aggregate and bitumen. ZycoTherm-AS is compatible with all aggregate types and performs especially well with problematic aggregates such as quartzites & granites.

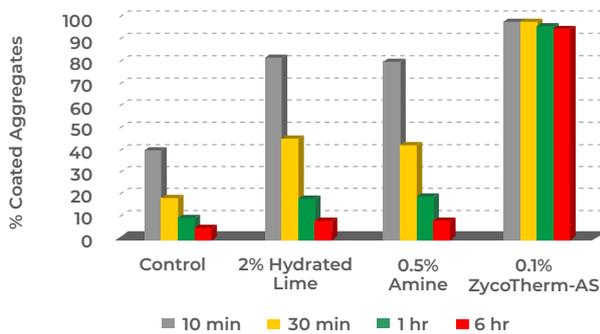
BENEFITS

- Compatible with all aggregate types
- Environmentally friendly
- Non-toxic
- Odor free
- Extremely low dosage rates
- Excellent salt tolerance
- Compatible with PPA, SBS & CRMB

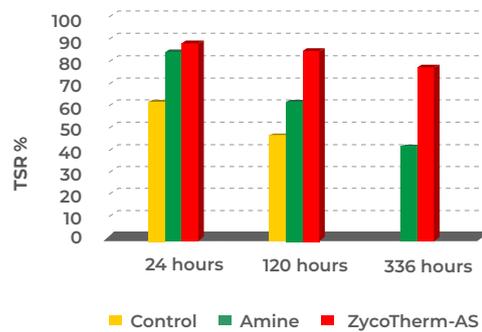
CHEMICAL BONDING

Unlike conventional antistrippers which form a weak physical bond between the aggregate and bitumen, ZycoTherm-AS forms a permanent chemical bond between the aggregate and the bitumen. Due to the permanent nature of the chemical bond formed, there are significant gains with respect to moisture resistance, durability and overall life cycle costs for the pavement. ZycoTherm-AS is compatible with all aggregate types, works at significantly lower dosages compared to conventional antistrippers and is an environmentally friendly additive that is non-corrosive and odor free.

ASTM D 3625 BOIL TEST



EXTENDED CONDITIONING
TSR COMPARISON

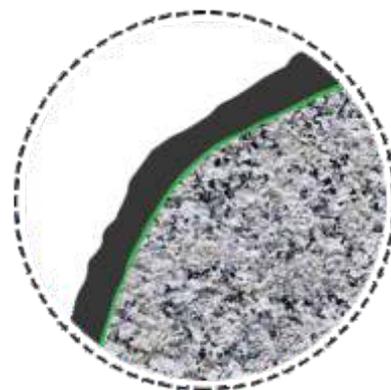


COMPLETE COATING

ZycoTherm-AS modified bitumen coats aggregate surfaces in a significantly faster and easier manner compared to conventional additives. The superior coating and wetting attributes of ZycoTherm-AS ensure easy coating of fines, better mixing of RAP and jet black looking mixes. The complete coating of aggregates by ZycoTherm-AS modified bitumen also leads to mixes that are free of pinholes and have reduced stripping and oxidative potential.



Without ZycoTherm-AS



With ZycoTherm-AS

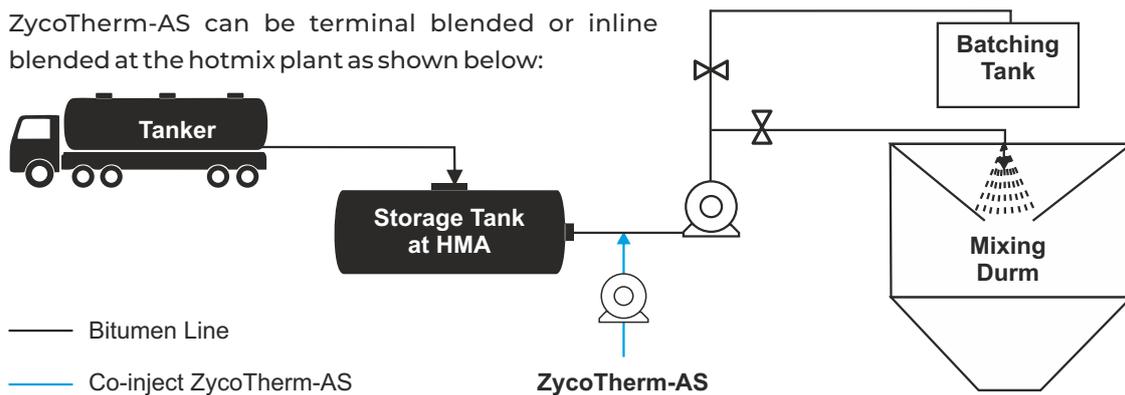
DOSAGE

- The typical dosage range for ZycoTherm-AS is 0.03 to 0.1% by weight of the bitumen binder. If aggregate type and characteristics are known, refer to the table below for indicative dosages. Adjust the same based on mix testing.
- It is critical that ZycoTherm-AS be thoroughly mixed into the bitumen to ensure homogenous distribution of the product.

AGGREGATE TYPE	ZycoTherm-AS Dosage for Antistrip Benefits		
	AGGREGATE WATER ABSORPTION %		
	0.5-0.8	0.9-1.4	1.5-2
Limestone, Dolomite	0.03	0.03	0.05
Basalt, Gabbro	0.03	0.03	0.05
Granite, Granodiorite, Rhyolite	0.03	0.05	0.05
Quartzite	0.03	0.05	0.05
Greywacke, Andesite, Sandstone	0.03	0.05	0.05

BLENDED METHODS

ZycoTherm-AS can be terminal blended or inline blended at the hotmix plant as shown below:



ADVANTAGES

Paving

- Reduced odor
- Improved mix flow & cleaner equipments
- Dark black look

Manufacturing

- Reduced odor
- Cleaner tanks, coils & elevators
- Cleaner flights of the mixing chamber

Health and Environment

- Non corrosive
- Odor free
- Health rating of 1
- TSCA Compliant
- REACH Compliant
- DSL Compliant

STORAGE & SHELF LIFE

ZycoTherm-AS should be stored 41 – 113 °F (5 to 45 °C) in a shaded, dry area away from sunlight, heat, source of sparks, rain and standing water. The container lid should be securely fastened every time it is used. It's shelf life is 48 months. In case the product freezes at low temperatures, allow it to thaw and unfreeze.

ABOUT ZYDEX

Established in 1997, Zydex is a specialty chemicals company with the purpose of innovating for sustainability.

Beyond pavement products, Zydex offers a diverse set of chemical technologies for the textile, agriculture and civil construction industries. We were recently recognised as one of the 25 Most Innovative Companies in India by the Confederation of Indian Industries (CII).

Sustainable Green Chemistry

Zydex is deeply committed to sustainable chemistries that ensure a greener future for everyone. Our commitment has made us a pioneer in introducing non-polluting and non-hazardous technologies that conserve, protect and enhance the environment. Pursuing chemical innovations that would mean a greener, purer and more resource renewable world is our passion. Our technologies have been recognized by the International Road Federation (IRF), and have been globally adopted.

GLOBAL PRESENCE

