BITUMIX ALJ20w

Generic Data	
Product Name	Natural Asphalt
Brand Name	BITUMIX ALJ20
CAS Number	12002-43-6
Main Use	Additive for Asphalt and Bituminous Waterproofing Compounds
Registration Number	N/A (pre-registered as 601-660-8 on 30/11/2008)
Index 67/548/EEC	N/A
REACH	Not subject to REACH
HS Code	27.14.90.00

Description: BITUMIX is a high molecular weight resinous hydrocarbon. It is soluble in aromatic and aliphatic solvents, as well as petroleum asphalt. Due to its unique compatibility, it is used to harden softer petroleum products, to decrease the penetration and raise the softening point of the bitumen. It is mainly composed of asphaltenes; thus, it Is classified as a Natural Asphalt, and not subject to REACH.

BITUMIX is used as additive in bituminous compounds. Thanks to the identical chemical composition (predominantly asphaltenes) the product is easily blended with the bitumen with no need for high shear milling as is the case with many other modifiers. The additive raises the compound's softening point and decrease the penetration, giving the BITUMIX-modified asphalts higher stability, reduced deformation, reduced temperature susceptibility and increased resistance to water stripping than non-modified asphalts.

Thanks to its lower price compared to the bitumen, BITUMIX also brings an economic benefit without detriment to the quality. The product can replace, depending on the type of bitumen used and the cold flexibility of the final product, up to 15% of bitumen content. It can be also used to make both solvent-based and emulsion pavement sealers with superior appearance and weathering properties. It is not soluble in water, alcohols, or acetone.

Technical Specification of Lumps

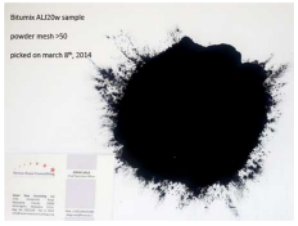
TEST	Unit	min	max	Method
Ash	wt%	12	22	ASTM D-174
Moisture	wt%	1	3	ASTM D-173
Asphaltene Content	wt%	55	65	ASTM-D172
Softening Point	°C	120	140	ASTM D-36
Flash Point	°C	280	310	Clevenland Open Cup
Specific Gravity	g/lt	1,01	1,10	ASTM-D3289
Mass Loss at 163°	%	0,7	0,9	ASTM-D1754

Packaging. IN ONE TON JUMBO BAGS LOADED IN 20' or 40' CTN OR ON TRUCK (for European destinations).

Loading Table

Loading Table (in metric tons)	In 20' FCL		In 40' FCL		In TRUCK	
	From	To	From	To	From	To
In Jumbo Bags – LUMPS	16	18	22	24	20	22





Physical/Chemical Specification

SOLUBILITY		
Chemical Group	**Component**	**Soluble**
Aliphatic Hydrocarbons	VM&P Naphtha	YES
----	Mineral Spirits	YES
----	Solvents with KB	YES
Aromatic Hydrocarbons	All	YES
Alcohols	All	NO
Chlorinated Hydrocarbons	All	YES
Esters	Methyl Acetate	NO
----	Ethyl Acetate	Slight
----	n-Butyl Acetate	Slight
Glycols	All	NO
Glycol Ethers	All	NO
Glycol Ether Esters	All	NO
Ketones	Acetone	NO
----	MEK	NO
----	MIBK	NO
Other Solvents	Carbon Disulfide	YES
----	Carbon Tetrachloride	YES

Adhesive Capacity			
Coating System	**Adesivity**	**Coating System**	**Adesivity**
Natural rubber	FAIR	Ethylene/vinyl acetate	GOOD
Cellulose esters	POOR	SBS rubber	EXCELLENT
Phenolic	GOOD	Polychloroprene rubber	EXCELLENT
Resorcinol formaldehyde	FAIR	Nitrile rubber	FAIR
Urea formaldehyde	GOOD	Butyl rubber/polyisobutylene	GOOD
Melamine formaldehyde	GOOD	Silicone	GOOD
Alkyd	GOOD	Polyurethane	FAIR
Epoxy	FAIR	Vinyl ethers	GOOD
Polyurethane	FAIR	Resinates	GOOD
Acrylic	FAIR	Resin modified	EXCELLENT
Unsaturated polyester	FAIR	C9 aromatic	GOOD
Polyaromatic	GOOD	DCPD	EXCELLENT
Acrylic acid diester	POOR	Terpene	EXCELLENT
Polyvinyl acetate	FAIR	Terpene phenolic	GOOD
Polyvinyl alcohol	FAIR	Phenolic modified	GOOD
Polyvinyl chloride	GOOD	maleic-fumaric modified	EXCELLENT
Acrylic	FAIR	Alkyd	GOOD
Polyamide	POOR	Shellac	POOR
Phenoxy	POOR		

Standards ASTMD36-95 ed UNI EN 1426

Miscellaneous: For any other information please refer to MSDS

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