

A large asphalt tanker ship is docked at a pier. The ship's hull is dark grey, and the name "ASPHALT TANKER" is visible on the side. The ship is connected to the pier by a metal walkway. In the background, there is a green hill and a city skyline under a blue sky. A blue semi-transparent overlay covers the lower half of the image, containing the text "An established bitumen supplier" and the Vitol logo.

An established
bitumen supplier



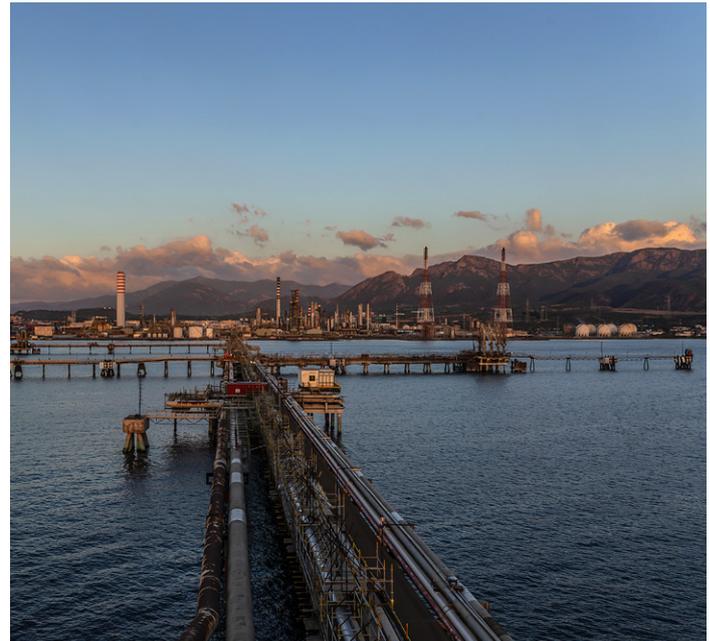
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Delivering energy solutions for today and tomorrow

Every day Vitol produces, manages and delivers energy to consumers and industry worldwide, efficiently and reliably. With a presence across the energy spectrum from traditional, through transitional and to sustainable energy, Vitol leverages its market leading expertise and global scale to deploy energy solutions.



A world leader in energy

Our outstanding physical and financial operations underpin our business worldwide, enabling us to deliver, consistently

- unique expertise and understanding of market dynamics
- largest independent mover of energy products, trading ~550mTOE
- presence in all major trading centres
- global network of energy infrastructure in key locations
- one of the largest spot charterers globally: 6,000+ sea voyages per annum

Established and financially stable

- revenues of over \$400 billion in 2023
- founded in 1966: almost 60 years of profitable operations, built steadily
- investment grade rating from two agencies
- stable and broad employee ownership model
- strong balance sheet, conservatively managed
- rigorous approach to risk management
- long-term outlook
- conservative financial management ensures both stability and the capacity to deploy capital quickly

A proven partner



We have built successful partnerships over the long-term with producers, refiners and distributors worldwide

- a global network of energy, industrial, governmental and other customers built over many years
- working in partnership with integrity and focused on delivering solutions
- we operate collaboratively, deploying expertise, infrastructure and balance sheet to build solutions
- investing alongside partners in assets which complement our core trading business and deliver independent returns

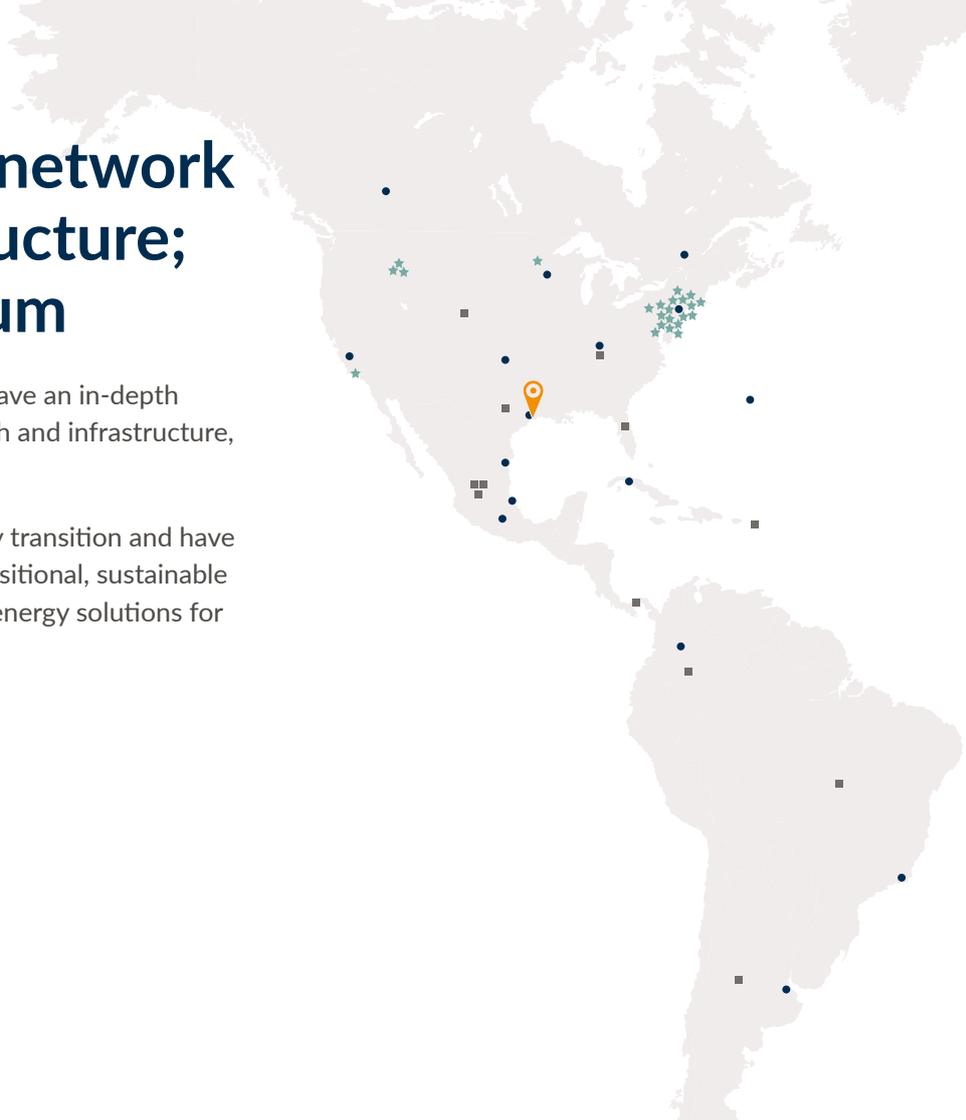
We have a global network of energy infrastructure; across the spectrum

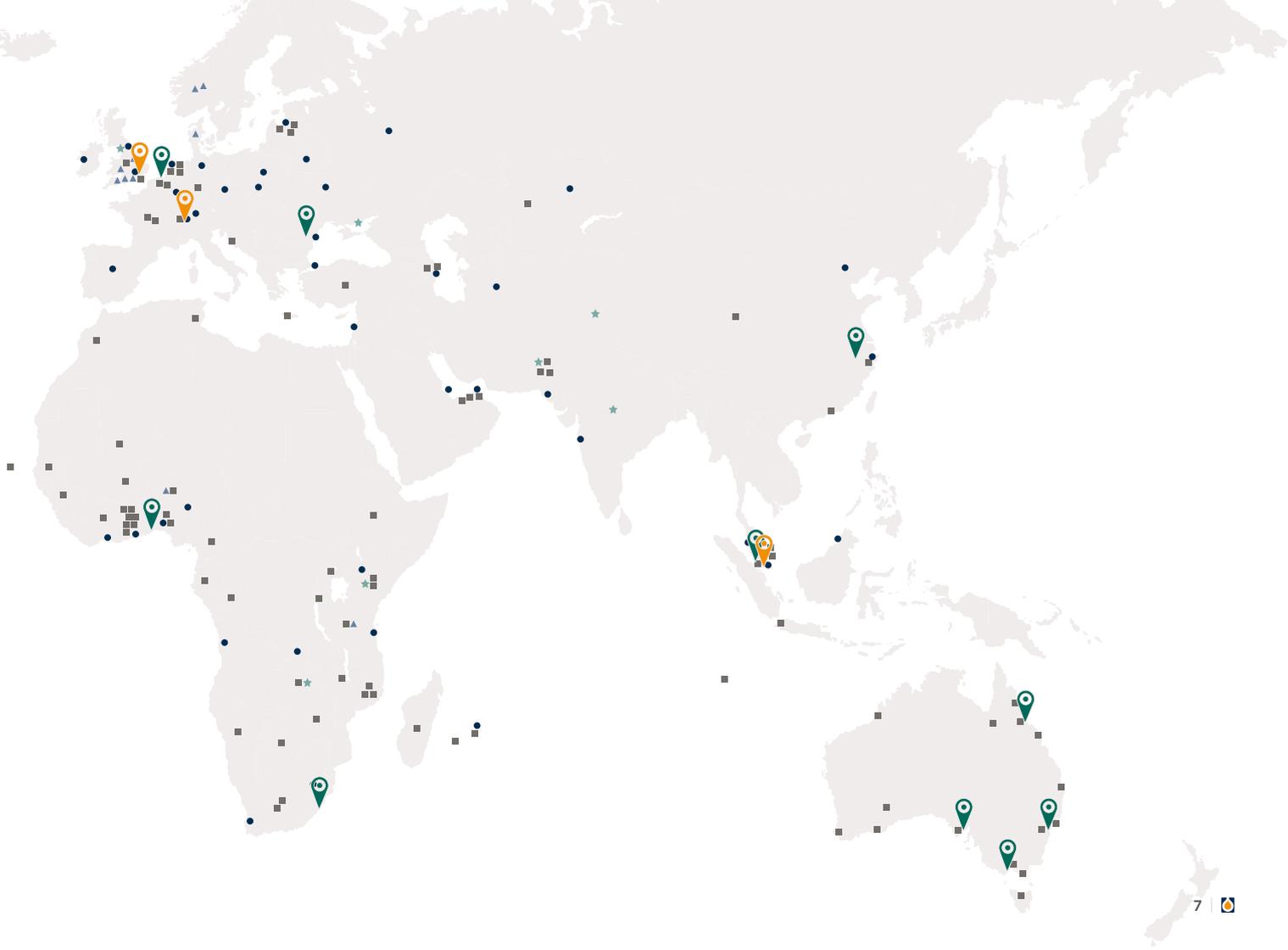
As experts in physical energy markets we have an in-depth technical and logistical understanding, reach and infrastructure, deployed to optimise value.

We are committed to facilitating the energy transition and have established expertise across a range of transitional, sustainable and renewable energy solutions to deliver energy solutions for the foreseeable future.

Key

- Crude oil and product assets
- ▲ Transitional energy assets
- ★ Renewable energy assets
- Vitol presence
- 📍 Bitumen hubs
- 📍 Bitumen terminals





An established bitumen supplier

with market expertise

- trading 1.5-2 million tonnes bitumen per annum
 - expertise in: trading, sales production, plants, transportation, operations, product development, laboratory and application
 - forward-facing and back office teams, with decades of experience in the bitumen space
-

offering specialised logistical solutions

- access to global network of terminals and infrastructure
 - transportation of parcel sizes from 5,000 tonnes to 34,000 tonnes
 - network access for unconventional deliveries: bags, ISO containers, trucks, drums etc
 - experienced operational team engineering solutions for deliveries in low infrastructure and challenging locations
 - transload to trucks, containers etc
-

and flexible, global delivery

- commercial and operational teams around the world with hubs in Geneva, Houston, London and Singapore
- global footprint of production and distributions systems with strategically positioned terminals
- large bitumen fleet with 12 specialised vessels, owned and on time charter



Delivering leading expertise and innovation



A comprehensive product portfolio

Our operations are built upon a leased and proprietary network of physical refining and storage facilities enabling us to produce unique grades and products.

We can supply a wide variety of international grades of bitumen and provide bespoke specifications to meet the requirements of our customers, including;

- penetration grade bitumen meeting specifications for China, Europe, South Africa and Southeast Asia
- viscosity grade bitumen meeting specifications for Australia, India and South America
- performance grade (PG) bitumen
- additional asphalt products including cutbacks, emulsions and flux



Operational expertise

Delivering creative solutions to operationally challenging locations:

- portable racks
- discharge to ISO-tainers
- ship-to-ship (STS) transfers
- spacer barge use

Technical expertise

Dedicated technical staff work with counterparties on:

- understanding and determining the correct supply
- handling and usage concerns
- blending and material adjustments
- specialty products
- laboratory concerns, expansions, training

Our customers are in safe hands

Our team work to understand the needs of each customer.

As a supply partner we balance cost and quality in order to make you successful.

We understand the asphalt market, benefitting from in-house knowledge of the entire industry from production to pavement recycling.

We offer the highest standard of quality assurance for our products with testing performed by independent labs to ensure exact specifications are met. We are subject to strict compliance with HSE regulations and maintain the highest operational standards.

We offer our customers:

- risk management – a measured and conservative approach minimising price risk
- security of supply – with access to seaborne imports
- and competitive pricing



Customised bitumen solutions

We collaborate with our partners to source the material for each application we supply and produce a unique range of grades and products to suit the requirements of our customers.

Keep reading to learn more about the the variety of international bitumen grades we supply in markets across the globe.

Asia-Pacific

Australia

VIVA Energy

- 4 state of the art terminals with blending and import capabilities
- high quality products offered:
 - standard bitumen products (AS2008 below)
 - full range AS2008 binders
 - full range ATS3110 binders
 - cutbacks AS2157
 - Polymer Modified Binders (ATS3110)
 - specialty binders
 - cutters and fluxes (AAPA advisory note 21)
 - precoats
 - opt in carbon neutral options
- experienced staff, with technical expertise delivering a dedicated service.
- specialty, customer specific products available: <https://www.vivaenergy.com.au/business/bitumen/bitumen-products>

Property	Requirement-AS2008										Test method
	C170		C240		C320		C450		C600		
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
Viscosity at 60°C, Pa.s	140	200	190	280	260	380	Report		500	700	AS 2341.2
Viscosity at 135°C, Pa.s	0.25	0.45	0.32	0.55	0.4	0.65	–	0.7	0.6	0.85	AS2341.2 or AS2341.3 or AS2341.4
Penetration at 25°C (100g, 5s), 0.1 mm	62	–	53	–	40	–	Report		20	–	AS 2341.12
Flashpoint, °C	250	–	250	–	250	–	250	–	250	–	AS 2341.14 or ASTM D92
Insolubles in toluene, % m	–	1	–	1	–	1	–	1	–	1	AS 2341.8 or AS/NZ 2341.20
Viscosity at 60°C, % of original aft RTFOT)	–	300	–	300	–	300	–	–	–	300	AS/NZA 2341.10 and AS 2341.2
	–	340	–	340	–	340	–	–	–	340	ASTM D2872 and AS 2341.2
Viscosity at 60°C after RTFOT, Pa.s	–	–	–	–	–	–	750	1150	–	–	ASNZS 2341.10 and AS 2341.2
	–	–	–	–	–	–	850	1300	–	–	ASTM D2872 and AS 2341.2
Penetration at 25°C (100g, 5s), 0.1 mm	–	–	–	–	–	–	26	–	–	–	AS/NZS 2341.10 or ASTM D2872 and AS 2341.12
Long-term effect of heat and air, days									–	–	AS/NZS 2341.13 and AS/NZS 2341.5
Density at 15°C, kg/m ³											AS 2341.7
Mass change, % m	–	–	–	–	–	–	-0.6	0.6	–	–	AS/NZS 2341.10 or ASTM D2872

Vitol offers Polymer Modified Asphalts for many paving applications from Australia. A selection of options we offer can be found below.

Property of PMA for spray seal	Requirement ATS3110 Table 8.1					Test method
	S10E	S15E	S20E	S35E	S45R	
Viscosity at 165°C (Pa.s) max.	0.55	0.55	0.6	0.55	4.5	AS/NZS 2341.1 or ATM-111
Torsional recovery at 25°C, 30s (%)	22-50	36-62	38-70	16-32	25-55	ATM-122
Softening point (°C)	48-64	55-75	65-95	48-56	55-65	AS 2341.18
Stress ratio at 10°C min.	TBR	TBR	TBR	TBR	TBR	AGPT/T125
Consistence 6% at 60°C (Pa.s) min.	300	400	500	250	800	AGPT/T121
Stiffness at 15°C (kPa) max.	140	140	NA	180	180	AGPT/T121
Stiffness at 25°C (kPa) max.	NA	NA	35	NA	NA	AGPT/T121
Compressive limit at 70°C, 2kg (mm) min.	NA	NA	NA	NA	0.2	AGPT/T108
Segregation (%) max.	-8 to +8	-8 to +8	-8 to +8	-8 to +8	-8 to +8	AGPT/T108
Flash point (°C) min.	250	250	250	250	250	ATM-112
Mass change (%)	-0.6 to +0.6	-0.6 to +0.6	-0.6 to +0.6	-0.6 to +0.6	-0.6 to +0.6	ATM-103

Property of PMA for spray seal	Requirement ATS 3110 Table 8.2					Test method
	S10E	S15E	S20E	S35E	S45R	
Viscosity at 165°C (Pa.s) max.	1.1	0.6	0.9	1.1	0.9	AS/NZS 2341.1 or ATM-111
Torsional recovery at 25°C, 30s (%)	Jun-30	38-70	55-80	60-86	25-40	ATM-122
Softening point (°C)	62-74	65-95	82-105	88-110	82-105	AS 2341.18
Stress ratio at 10°C min.	TBR	TBR	TBR	TBR	TBR	AGPT/T125
Consistence 6% at 60°C (Pa.s) min.	1000	500	900	1000	2500	AGPT/T121
Stiffness at 25°C (kPa) max.	150 max	35 max	30 max	30 max	90+	AGPT/T121
Compressive limit at 70°C, 2kg (mm) min.	NA	NA	NA	NA	NA	AGPT/T108
Segregation (%) max.	-8 to +8	-8 to +8	-8 to +8	-8 to +8	-8 to +8	AGPT/T108
Flash point (°C) min.	250	250	250	250	250	ATM-112
Mass change (%)	-0.6 to +0.6	-0.6 to +0.6	-0.6 to +0.6	-0.6 to +0.6	-0.6 to +0.6	ATM-103

Vitol offers

The medium curing grades of cutbacks for Australia:

AMC00H	AMCOH
AMC1H	AMC2H
AMC3H	AMC4H
AMC5H	AMC6H
AMC7H	Primer 20H
Primer 1500H	

Two grades of cutter and one grade of flux:

Low flash cutter
High flash cutter
Flux

Property of medium cure cutter	Requirement	Test method
Distillation, IBP (°C)	132-160	
Distillation, FBP (°C)	265 min.	ASTM D86
Temperature at 50% recovery	220 max	
Flash point, PMCC (°C)	35 min	AS 2106
Viscosity at 40°C mm ² /s	1.0-1.4	ASTM D445
Density at 15°C (kg/m ³)	780-820	AS 2341.7
Miscibility w/equal parts C170	Complete	
Water content (%)	0.05 max	AS 2341.9
Aromatics (% v)	15 min	ASTM D1319

Property of medium cure cutter	Typical values	Test method
Flash point, (°C)	65 min	IP 170
Viscosity at 40°C mm ² /s	2.5-5.0	ASTM D445
Density at 15°C (kg/m ³)	820-890	ASTM D1298

- 7,000MT storage facility
- offering standard grades as well as China Guobiao National Standard grades
- strategically located at key import/export hub in East China
- strong access to a range of domestic bitumen consumers as well as energy and industrial customers across China

China grades

China national standard grades (Guobiao Standard)

China national standards (Guobiao Specs)	Grades	Test method	70	90
Penetration @25C (dmm)		T0604	60-80	80-100
Penetration index	A	Annex A		
	B	Annex A		
Softening point (°C)	A	T0604	min 46	45
	B	T0604	min 44	43
	C	T0604	min 43	42
Dynamic viscosity at 60°C (Pa.s)	A	T0620	min 180	160
Ductility @10°C (cm)	A	T0605	min 25	45
	B	T0605	min 20	30
Ductility @15°C (cm)	A, B	T0605	min 100	100
	C	T0605	min 40	50
	A	T0615	max 2.2	2.2
Wax content (wgt%)	B	T0615	max 3	3
	C	T0615	max 4.5	4.5

China national standards (Guobiao Specs)	Grades	Test method	70	90
Flash point (°C)		T0611	min 260	245
Solubility in trichloroethane (wgt%)		T0607	min 99.5	99.5
Density @15°C (g/cm ³)		T0603	Report	Report
Loss of heating TFOT (wgt%)		T0610/ T0609	max 0.8	0.8
Penetration of residue TFOT (%)	A	T0604	min 61	57
	B	T0604	min 58	54
	C	T0604	min 54	50
Ductility @10°C TFOT (cm)	A	T0605	min 6	8
	B	T0605	min 4	6
Ductility @15°C TFOT (cm)	A	T0605	min 15	20

PG grades

PG grades			PG 64-22
Average 7-Day maximum pavement design temperature	°C	-	64
Minimum pavement design temperature	°C	-	> -22
Flash point temperature	°C	AASHTO T48	Min 230
Viscosity maximum 3 Pa.s, test temperature	°C	AASHTO T316	135
Dynamic shear G*/sin minimum 2.2 KPa test temperature	°C	AASHTO T315	64
Rolling thin film oven test (T 240)			
Mass change	%	AASHTO T240	Max 1.00
Dynamic shear G*/sin minimum 2.2 KPa test temperature, @10 rad/s	°C	AASHTO T315	64
Pressure aging vessel (PAV) test (AASHTO R28)			
PAV aging temperature	°C	AASHTO R28	100
Dynamic shear G*/sin maximum 5000 KPa test temperature, @10 rad/s	°C	AASHTO T315	46
Creep stiffness S maximum 300 Mpa M-value minimum 0.300 test temp,@60s	°C	AASHTO T313	-24
Direct tension failure strain minimum 1 % test temp@1mm/min,	°C	AASHTO T314	-24
Critical low cracking temperature critical cracking determined by PP42 test temp	-	AASHTO PP42	-24

- a new, state of the art 50,000MT capacity storage terminal; operational from 2025
- supplying paving, roofing and industrial asphalt markets
- blending capabilities for offering product variety
- blown bitumen capabilities to offer further product grade flexibility and range of grades
- rack availability
- import and export capable for large vessels of a wide range (500-120,000DWT)
- designated truck loading bay with loading and unloading infrastructure
- offering Jabatan Kerja Raya JKR ASTM market grades (60/70, 80/100), viscosity grades
- dedicated, experienced and knowledgeable sales and operations staff offering individualised customer service and safe and professional operations

Property	Test method (ASTM)		Grade 60-70	Grade 60-80	Grade 80-100	Oxidized bitumen 115/15
Penetration @25C	D5		60-70	60-80	80-100	Oct-20
Density @15C	D70	min	1	1	1	
Softening point (°C)	D36	min	48	44	42	110-120
Ductility @25C (cm)	D113	min	100	100	100	1.5
Flash point (°C)	D92	min	275	275	250	250
Solubility in trichloroethane (wgt%)	D2042	min	99	99	99	99
Ductility of residue @15C TFOT (cm)	D113/D1754	min	Report	50	50	
Loss of heating TFOT (wgt%)	D6/D1754	max	0.5	0.5	0.5	0.5
Penetration of residue TFOT	D5/D1754	min	50	60	80	
Wax content (wgt%)	DIN 52015/12606	max	2	2	2	
Viscosity @120C (Cst)	D4402		report	report	report	

Europe

Belgium

ATPC: Antwerp

- state of the art terminal with 60,000MT storage capacity
- supplying paving, roofing and industrial asphalt markets
- high output semi-automated truck rack with 8 stations
- waterborne, large vessel, imports and export capabilities
- offering CE certified EN grades from 10 pen to 220 pen
- polymer modified tolling
- supplying paving, roofing and industrial asphalt markets
- dedicated, experienced and knowledgeable sales staff offering individualised customer service

Romania

Ukraine

- 8,000MT storage terminal
- import capable
- truck rack capability

Property	Requirement EN 12591								Test method
	20/30	30/40	35/50	40/60	50/70	70/100	100/150	160/220	
Penetration at 25°C (0.1mm)	20-30	30-40	35-50	40-60	50-70	70-100	100-150	160-220	EN 1426
Softening point (°C)	55-63	52-60	50-58	48-56	46-54	43-51	39-47	35-43	EN 1427
Resistance to hardening @ 163°C									
Retained penetration (%)	55 min	53 min	53 min	50 min	50 min	46 min	43 min	37 min	
Increase in softening point-severity 1 (°C)	8 max	8 max	8 max	9 max	9 max	9 max	10 max	11 max	EN 12607-1
Increase in softening point-severity 2 (°C)	10 max	11 max	11 max	11 max	11 max	11 max	12 max	12 max	
Change of mass (%)	0.5 max	0.5 max	0.5 max	0.5 max	0.5 max	0.5 max	0.8 max	0.8 max	
Flash point (°C)	240 min	240 min	240 min	230 min	EN ISO 2592				
Solubility (%)	99.0 min	99.0 min	99.0 min	99.0 min	99.0 min	99.0 min	99.0 min	99.0 min	EN 12592
Penetration index	-1.5 to 0.7	-1.5 to 0.7	-1.5 to 0.7	-1.5 to 0.7	-1.5 to 0.7	-1.5 to 0.7	-1.5 to 0.7	-1.5 to 0.7	Annex A
Dynamic viscosity (Pa.s)	440 min	260 min	225 min	175 min	145 min	90 min	55 min	30 min	EN 12596
Fraass breaking pt. (°C)	NR	-5 max	-5 max	-7 max	-8 max	-10 max	-12 max	-15 max	EN 12593
Kinematic viscosity @ 135°C (mm²/s)	530 min	400 min	370 min	325 min	295 min	230 min	175 min	135 min	EN 12595

South Africa

Durban

- state of the art 5,000-6,000MT storage terminal
- supplying local paving, roofing and industrial asphalt
- truck rack availability
- vessel imports capabilities.
- dedicated, experienced and knowledgeable sales staff offering individualised customer service

Property	Test method	50/70
Penetration (25°C, 5s, 100g), (0.1mm)	ASTM D5	50-70
25°C Ductility (cm)	ASTM D113	min 100
Softening point (RandB),(°C)	ASTM D36	min 46
Solubility in trichloroethylene (%)	ASTM D2042	min 99
Flash point (°C)	ASTM D92	min 232
Specific gravity @ 25/25 °C		Report
Density(15°C or 25°C),kg/m³	ASTM D70	Report
After TFOT (or RTFOT)	Loss of weight (%)	ASTM D1754 max 0.5
	Residual penetration ratio (%)	ASTM D5/D1754 min 54
	Ductility of residue at 25°C, cm	ASTM D1754 min 50

West Africa

Nigeria: Port Harcourt

- 6,000MT import terminal
- supplying paving grade 60-70 per ASTM D946
- truck loading capability

Property of medium cure cutter	Requirement ASTM D946 T2	Test method
Penetration at 25°C (0.1mm)	60-70	ASTM D5
Softening point (°C)	46 min	ASTM D53
Flash point (°C)	230 min	ASTM D93
Ductility at 25°C, 5 cm/min (cm)	100 min	ASMT D113
Solubility (%)	99.0 min	ASTM D2042
Retained penetration after TFOT (%)	52 min	ASTM D5
Ductility at 25°C, 5 cm/min (0.1mm)	50 min	ASTM D113

Our fleet

Our specialised bitumen fleet is equipped with the latest technologies enabling us to deliver our products safely and reliably to customers across the globe.

NAME
Asphalt Transporter

DWT
9,221

FLAG / CLASS
Cyprus / BV

YARD / LOCATION
Kraljevica / Croatia

BUILT / CONV YR
2008

NAME
Sunpower

DWT
4,999

FLAG / CLASS
Panama / CCS

YARD / LOCATION
Ningbo Litian / China

BUILT / CONV YR
2008

NAME
Asphalt Carrier

DWT
9,230

FLAG / CLASS
Marshall Islands / BV

YARD / LOCATION
Kraljevica / Croatia

BUILT / CONV YR
2010

NAME
Asphalt Spirit

DWT
14,484

FLAG / CLASS
Marshall Islands / BV

YARD / LOCATION
Sedef / Turkey

BUILT / CONV YR
2012

NAME
Asphalt Splendor

DWT
36,962

FLAG / CLASS
Marshall Islands / BV

YARD / LOCATION
Avic Dingheng / China

BUILT / CONV YR
2015

NAME
Amber Bay

DWT
12,799

FLAG / CLASS
Hong Kong / BV

YARD / LOCATION
Qing Shan / China

BUILT / CONV YR
2016

NAME
Lilstella

DWT
7,944

FLAG / CLASS
Marshall Islands /
Lloyds Register

YARD / LOCATION
Fujian Mawei / China

BUILT / CONV YR
2017

NAME
Asphalt Synergy

DWT
36,950

FLAG / CLASS
Marshall Islands / BV

YARD / LOCATION
AVIC Dingheng /
China

BUILT / CONV YR
2018

NAME
Baustella

DWT
7,995

FLAG / CLASS
Hong Kong / BV

YARD / LOCATION
Fujian Mawei / China

BUILT / CONV YR
2018

NAME
Asphalt Sonata

DWT
37,000

FLAG / CLASS
Marshall Islands /
Lloyds Register

YARD / LOCATION
Chengxi / China

BUILT / CONV YR
2024

NAME
Newbuild -TBC

DWT
16,300

FLAG / CLASS
(Flag) TBC

YARD / LOCATION
(Yard) China

BUILT / CONV YR
Q3 2025

NAME
Newbuild -TBC

DWT
16,300

FLAG / CLASS
(Flag) TBC

YARD / LOCATION
(Yard) China

BUILT / CONV YR
Q4 2025



Contact us:
bitumenenquiries@vitol.com

Singapore

128 Beach Road
28th Floor #28-01
Guoco Midtown Singapore
189773 Singapore
Tel: +65 6737 9922

London

4th Floor, Nova South
160 Victoria Street
London, SW1E 5LB
United Kingdom
Tel: +44 (20) 7973 4200

Houston

2925, Richmond Avenue
11th Floor Houston
TX 77098 USA
Tel: +1 (713) 230 1000

vitol.com