ISTANERGY
ENERGY BEYOND BORDERS

Product Catalogue

Bitumen ▪ Industrial Materials ▪ Packaging Solutions

2026 Edition

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About Istanergy

Istanergy is a Türkiye-based supplier of bitumen and industrial materials, serving infrastructure, construction, and energy projects across international markets. We supply products that meet recognized international standards while supporting customers with dependable sourcing, consistent quality, and efficient delivery.

With access to established production facilities, regional logistics, and export capabilities, Istanergy delivers a comprehensive range of bitumen grades and related products for road construction, airport infrastructure, industrial applications, and large-scale development projects.

Our presence across Türkiye, the Middle East, Africa, and Asia enables us to respond to regional market requirements while maintaining reliable supply chains for contractors, distributors, and industrial partners.

At Istanergy, we are committed to building long-term partnerships through quality products, technical expertise, and dependable service.

Global Reach

An integrated network spanning the Middle East, Africa, Asia, Europe, the CIS, and Central Asia, supporting efficient sourcing, regional distribution, and cross-border trade.

Through a combination of trading hubs, regional distribution networks, and established market presence, the Group facilitates the movement of products across key international markets while maintaining reliable access to supply and logistics solutions.

Its geographic footprint enables closer engagement with customers, suppliers, and strategic partners, allowing the Group to respond effectively to regional market requirements and evolving industry demands. By leveraging local market knowledge alongside international trade expertise, the Group supports seamless commercial operations across diverse territories.

This broad presence strengthens supply chain resilience, enhances market accessibility, and creates opportunities for long-term growth across multiple sectors, reinforcing the Group’s position as a trusted participant in global energy and industrial markets.

Product Portfolio

A comprehensive portfolio of industrial materials serving infrastructure, construction, manufacturing, and energy-related applications.

Bitumen Solutions

Bitumen is used to bind materials together in asphalt for building and repairing roads. Different types are chosen based on weather, traffic, and project needs.

The Istanergy portfolio is built to support road construction, maintenance, waterproofing, and a wide range of infrastructure applications.

Penetration Grade

Penetration Grade Bitumen is a petroleum-based paving binder classified according to its penetration value, which indicates the relative hardness or consistency of the material. The grading system enables engineers and contractors to select the appropriate binder based on climatic conditions, traffic loads, and pavement design requirements.

Widely specified for asphalt production and transportation infrastructure, Penetration Grade Bitumen provides the binding properties required to produce durable pavements with reliable long-term performance. Its availability across multiple grades allows it to be used in a broad range of paving and civil engineering applications.

Specification (AASHTO M20 and ASTM D946)

Property	Unit	Grade 50/40	Grade 70/60	Grade 100/80	Grade 120/100	Grade 200/300	Test Method
Specific Gravity @ 25°C	–	1.01–1.06	1.01–1.06	1.01–1.05	1.01–1.04	0.99–1.04	ASTM D-70
Penetration @ 25°C, 100 g, 5 sec	0.1 mm	40–50	60–70	80–100	100–120	200–300	ASTM D-5
Softening Point (Ring & Ball)	°C	52–60	49–56	45–52	42–49	32 Min	ASTM D-36
Ductility @ 25°C, after TFOT, Min	cm	100 Min	100 Min	100 Min	100 Min	100 Min	ASTM D-113
Loss on Heating, Max	%Wt	0.2 Max	0.2 Max	0.5 Max	0.5 Max	1 Max	ASTM D-6
Drop in Penetration after Heating, Max	%	20.0 Max	20.0 Max	20.0 Max	20.0 Max	37 Min	ASTM D-6 & D-5
Flash Point (Cleveland Open Cup), Min	°C	250.0	250.0	232.0	250.0	177	ASTM D-92
Solubility in CS_2, Min	%Wt	99.5	99.5	99.5	99.5	99.0	ASTM D-4
Spot Test	–	Negative	Negative	Negative	Negative	Negative	*A

Viscosity Grade

Viscosity Grade Bitumen is designed to provide controlled flow characteristics during asphalt production, helping maintain consistent mixing, coating, and compaction throughout the paving process. The grading system is based on viscosity measurements, offering greater control over binder performance at elevated temperatures.

Suitable for highways, urban roads, airports, and heavy-duty pavements, Viscosity Grade Bitumen supports consistent asphalt quality across a wide range of construction and infrastructure applications.

Specifications In accordance with AASHTO M226

Property	VG10-	VG20-	VG30-	VG40-	Test Method
Dynamic Viscosity @ 60°C (Poise)	± 1000 200	400 ± 2000	600 ± 3000	800 ± 4000	IS 1206 (Part 3)
Kinematic Viscosity @ 135°C (Min, cSt)	250	300	350	400	IS 1206 (Part 3)
Penetration @ 25°C, 100 g, 5 sec, Min	80	60	45	35	IS 1203
Flash Point (°C)	220	220	220	200	IS 1448 [P:69]
Softening Point (°C)	40	45	47	50	IS 1205
Solubility in Trichloroethylene (Min %)	99.0	99.0	99.0	99.0	IS 1216
Test on Residue from Thin Film Oven Test	–	–	–	–	–
Ductility @ °25C, 5 cm/min (cm)	75	50	40	25	IS 1208
Viscosity Ratio @ °60C (Max)	4.0	4.0	4.0	4.0	IS 1206 (Part 2)

AC Grade (Asphalt Cement Grade)

AC Grade Bitumen is classified according to its viscosity at 60°C, providing a consistent binder for asphalt production and pavement construction. The grading system is identified by the prefix AC, with each grade representing a specific viscosity range to suit different climatic conditions and pavement requirements.

Commonly used in highways, urban roads, airports, and infrastructure projects, AC Grade Bitumen supports reliable mixing, application, and long-term pavement performance across a wide range of construction environments.

SPECIFICATIONS Based on AASHTO M226

Property	AC10-	AC20-	AC-30	AC40-
Dynamic Viscosity @ °60C (Poise)	± 1000 200	400 ± 2000	600 ± 3000	800 ± 4000
Kinematic Viscosity @ °135C (Min, cSt)	250	300	350	400
Penetration @ °25C, 100 g, 5 sec, Min	80	60	50	40
Flash Point (°C)	220	230	230	230
Solubility in Trichloroethylene (Min %)	99.0	99.0	99.0	99.0
Test on Residue from Thin Film Oven Test – Viscosity @	5000	10000	15000	20000
Ductility @ °25C, 5 cm/min (cm)	75	50	40	25
Spot Test	Negative			
Naphtha Solvent	Negative			
Naphtha–Xylene Solvent Xylene Percentage	Negative			
Heptane–Xylene Solvent Xylene Percentage	Negative			

Perfrmance Bitumen Grade

Performance Grade (PG) Bitumen is classified according to the temperatures and traffic conditions a pavement is expected to experience throughout its service life. The grading system helps engineers select the appropriate binder based on climatic performance rather than penetration or viscosity alone.

Designed for highways, airports, expressways, and heavily trafficked infrastructure, PG Bitumen improves resistance to rutting, fatigue, and thermal cracking, supporting longer-lasting pavement performance under demanding operating conditions.

Bitumen Performance Grade 76-10

Characteristics	Units	Standard	Value
Fresh Binder			
Flash Point	°C	AASHTO T48	>230
Rotational Viscosity @ °135C	Pa.s	AASHTO T316	<3.00
Original DSR (G*/sin)	°C	AASHTO T315	70
Hardening Resistance at °163C (RTFOT)			
Mass Change (Absolute Value)	%	AASHTO T240	1.00
DSR T for G*/sin > 2.20 kPa	°C	AASHTO T315	70
PAV Aging			
DSR T for G*·sin < 5000 kPa	°C	AASHTO T315	31
BBR T for Stiffness (S) < 300 MPa	°C	AASHTO T313	0
BBR T for m-Value > 0.3	°C	AASHTO T313	0

Test Title	Range	Test Method	Units
Viscosity @ °135C RV	Max 3.0	ASTM D4402	Pa.s
Flash Point	Min 230	ASTM D92	°C
Original Dynamic Shear (at °76C)	Min 1.0	ASTM D7175	kPa
RTFOT Dynamic Shear (at °76C)	Min 2.2	ASTM D7175	kPa
PAV Dynamic Shear (at °37C)	Max 5000	ASTM D7175	kPa
BBR, Creep Stiffness (at °0-C)	Max 300	ASTM D6648	MPa
BBR, m-Value (Slope) (at °0-C)	Min 0.3	ASTM D6648	–
Change of Mass	Max 0.2	ASTM D2872	wt%

		High Temperature				
		52	58	64	70	76
Low Temperature	-16	52-16	58-16	64-16	70-16	76-16
	-22	52-22	58-22	64-22	70-22	76-22
	-28	52-28	58-28	64-28	70-28	76-28
	-34	52-34	58-34	64-34	70-34	76-34
	-40	52-40	58-40	64-40	70-40	76-40

= Crude Oil = High Crude Oil = Modified Required

Cutback Bitumen

Cutback Bitumen is produced by blending paving grade bitumen with selected petroleum solvents to reduce viscosity, allowing application at lower temperatures without extensive heating. As the solvent evaporates after application, the binder gradually regains its original properties, providing effective adhesion and pavement performance.

Available Types

Rapid Curing (RC)

Contains highly volatile solvents, allowing quick evaporation and fast strength development. Suitable for spray applications and surface dressing.

Medium Curing (MC)

Formulated with medium-volatility solvents to provide a balanced curing rate for premix applications and maintenance works.

Slow Curing (SC)

Uses less volatile oils, providing extended workability for penetration macadam, stockpile mixes, and base stabilization.

Cutback Bitumen Specifications

Property	Units	RC70	RC250	MC30	MC70	MC250	MC3000	Test Method (ASTM)
To °190C	% Vol	Min 10	–	–	–	–	–	D402
To °255C	% Vol	Min 50	Min 35	Max 35	Max 25	Max 20	–	D402
To °260C	% Vol	Min 70	Min 60	75–30	70–10	55–5	Max 15	D402
To °316C	% Vol	Min 85	Min 80	95–75	93–65	90–60	75–15	D402
Residue, by Difference	% Vol	Min 55	Min 65	Min 50	Min 55	Min 67	Min 80	D402

Distillation Test: Distillate, Volume Percent of Total Distillate to 360°C

Property	Units	RC70	RC250	MC30	MC70	MC250	MC3000	Test Method (ASTM)
Viscosity at °60C	Pa	–60 240	240–60	120–30	120–30	120–30	120–30	D2170
Ductility at °25C	cm	Min 100	Min 100	Min 100	Min 100	Min 100	Min 100	D113
Solubility in Trichloroethylene	%Wt	Min 99	Min 99	Min 99	Min 99	Min 99	Min 99	D2042
Water	%Wt	Max 0.2	Max 0.2	Max 0.2	Max 0.2	Max 0.2	Max 0.2	D95

Emulsion Bitumen

Emulsion Bitumen is produced by dispersing fine bitumen droplets in water with the aid of an emulsifying agent, allowing the binder to be applied at lower temperatures without the need for heating. Once applied, the water gradually evaporates, enabling the bitumen to bond effectively with the aggregate and pavement surface.

Widely used for tack coats, prime coats, slurry seals, surface dressing, and pavement maintenance, Emulsion Bitumen provides efficient application while supporting reliable adhesion and long-term pavement performance.

Available Types

Cationic Emulsion

Contains positively charged bitumen particles, providing excellent adhesion to most mineral aggregates. Commonly used for road construction, maintenance, and surface treatment applications.

Anionic Emulsion

Contains negatively charged bitumen particles and is used with compatible aggregates for selected paving, sealing, and maintenance applications.

CATIONIC SPRAY GRADE EMULSIONS (SANS 4001 BT-4)

Property	KRS 60	KRS 65	KRS 70	Test Method
Viscosity @ °50C, Saybolt Furol Seconds	50–15	200–51	400–51	SANS 4001 BT5.2) 4-)
Binder Content, % (m/m)	63–60	68–65	73–70	SANS 4001 BT5.2) 4-)
Fluxing Agent Content, % (m/m) of Binder, Max.	5	5	5	SANS 4001 BT4.4) 4-)
Residue on Sieving, g/100 ml, Max.	0.25	0.25	0.25	SANS 4001 BT5.3) 4-)
Particle Charge – Standard Procedure (10 mA)	Positive	Positive	Positive	SANS 4001 BT5.4) 4-)
Binder Deposit on the Cathode after 30 min, g Min.	1.0	1.0	1.0	SANS 4001 BT5.4) 4-)
Sedimentation after 62 Complete Rotations	Nil	Nil	Nil	SANS 4001 BT5.6) 3-)
Typical Density in kg/litre @°60C	1,000	1,000	1,000	ASTM D3142 / D3142 M11-

CATIONIC STABLE GRADE EMULSIONS (SANS 4001 BT-4)

Property	KSS 60	KSS 65	Test Method
Viscosity @ °50C, Saybolt Furol Seconds	50 Max	200–51	SANS 4001 BT5.2) 4-)
Binder Content, % (m/m)	63–60	68–65	SANS 4001 BT5.2) 4-)
Fluxing Agent Content, % (m/m) of Binder, Max.	0	0	SANS 4001 BT4.4) 4-)
Residue on Sieving, g/100 ml, Max.	0.25	0.25	SANS 4001 BT5.3) 4-)
Particle Charge – Standard Procedure (10 mA)	Positive	Positive	SANS 4001 BT5.4) 4-)
Binder Deposit on the Cathode after 30 min, g Min.	–	–	SANS 4001 BT5.4) 4-)
Sedimentation after 62 Complete Rotations	Nil	Nil	SANS 4001 BT5.6) 3-)
Typical Density in kg/litre @°60C	1,000	1,000	ASTM D3142 / D3142 M11-
Coagulation Value when Mixed with Standard Silicon Flour % (m/m), Max.	2.0 Max	2.0 Max	SANS 4001 BT5.4) 3-)

CATIONIC MIX GRADE EMULSIONS (SANS 4001 BT-4)

Property	KMS 60	KMS 65	STOCKMIX 65	Test Method
Viscosity @ °50C, Saybolt Furol Seconds	50–20	200–51	200–51	SANS 4001 BT5.2) 4-)
Binder Content, % (m/m)	63–60	68–65	68–65	SANS 4001 BT5.2) 4-)
Fluxing Agent Content, % (m/m) of Binder, Max.	10–5	10–5	10–5	SANS 4001 BT4.4) 4-)
Residue on Sieving, g/100 ml, Max.	0.25	0.25	0.25	SANS 4001 BT5.3) 4-)
Particle Charge – Standard Procedure (10 mA)	Positive	Positive	Positive	SANS 4001 BT5.4) 4-)
Binder Deposit on the Cathode after 30 min, g Min.	–	–	–	SANS 4001 BT5.4) 4-)
Sedimentation after 60 Complete Rotations	Nil	Nil	Nil	SANS 4001 BT5.6) 3-)
Typical Density in kg/litre @°60C	1,000	1,000	1,000	ASTM D3142 / D3142 M11-
Aggregate Coating / Water Resistance Test	Pass	Pass	–	SANS 4001 BT5.5) 3-)

Beyond Bitumen

In addition to our bitumen portfolio, Istanergy also supplies selected petroleum products to support industrial and manufacturing requirements.

Based Oils and Additives

Available in Group I, Group II, and Group III grades, Base Oils are the foundation of automotive, industrial, marine, and specialty lubricants, delivering reliable performance across a wide range of applications.

Highlights

- Product Highlights
- Group I, II & III grades
- Lubricant manufacturing
- Automotive & industrial applications

Petrochemicals

Istanergy supplies a broad range of petrochemical products supporting manufacturing, construction, energy, and industrial operations. Our portfolio is sourced to meet consistent quality requirements across global markets.

Highlights

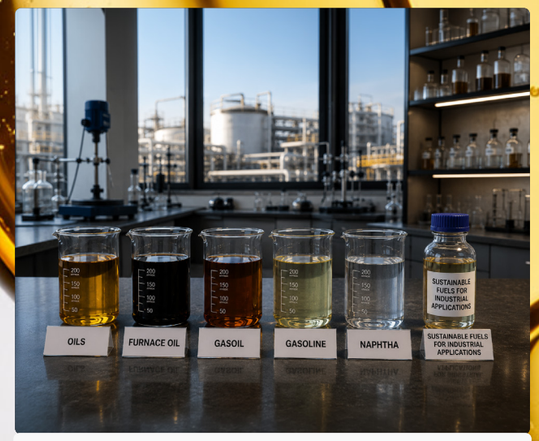
- White Spirit
- Naphtha
- Xylene
- Methanol
- Ethanol
- Urea
- Sulphur
- Carbon Black
- Glycols
- Fuel Oils

Waxes and White Oils

A comprehensive range of refined waxes and highly refined white oils for industrial, cosmetic, pharmaceutical, packaging, and food-related applications. Available in multiple grades to support diverse manufacturing requirements.

Highlights

- Fully Refined Paraffin Wax
- Semi-Refined Paraffin Wax
- Slack Wax
- Liquid Paraffin
- White Oil
- Petroleum Jelly
- Granular Wax



Fuels

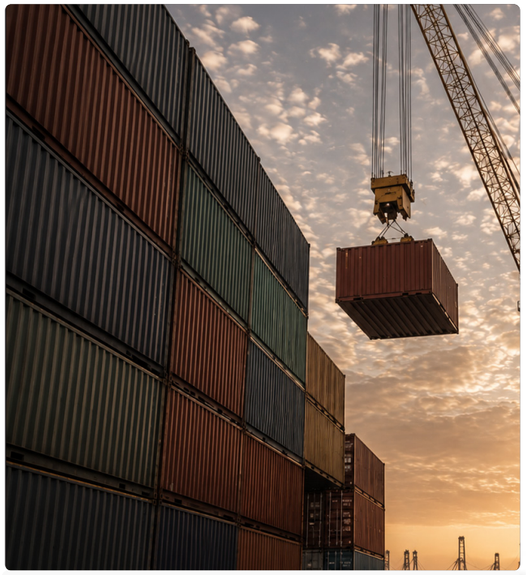
A range of fuel products for industrial, marine, power generation, and commercial applications. Available in bulk and packaged supply to support reliable operations across diverse industries.

Highlights

- Fuel Oil
- Furnace Oil
- Gasoil (Diesel)
- Gasoline
- Naphtha
- Sustainable Fuels

Packaging Solutions

Supporting customers worldwide with flexible packaging and delivery solutions designed for safe handling, efficient logistics, and reliable product supply. Available in multiple packaging formats to meet the operational requirements of infrastructure, construction, and industrial projects.



Bulk Shipment

Bulk shipment provides an efficient solution for large-volume bitumen supply. Ideal for ports, asphalt plants, and major infrastructure projects, it reduces handling while ensuring reliable, continuous delivery.

Steel Drums

Steel drums provide secure storage and transportation for bitumen. Suitable for export shipments, they ensure safe handling and flexible distribution in standard shipping containers.

Jumbo Bags

Jumbo bags offer a practical and cost-effective solution for solid bitumen. Designed for safe handling and transport, they maximize container utilization and simplify on-site operations.

Bitubox

Bitubox is an insulated container liner for transporting bitumen in standard shipping containers. It preserves product quality, simplifies unloading, and is ideal for export shipments and projects without bulk storage.

Integrated Supply Solutions

Supporting customers with dependable sourcing, storage, logistics, and international distribution, Istanergy delivers industrial materials efficiently across global markets. Our integrated supply network ensures consistent product availability and reliable delivery from origin to destination.

Supply & Logistics

We work with established production facilities and trusted suppliers to provide consistent access to bitumen and industrial materials that meet international quality standards.

Storage Solutions

Strategically located storage and handling facilities support secure inventory management, flexible supply, and efficient product distribution across regional and international markets.

Logistics & Shipping

Through an established logistics network, we manage road, sea, and multimodal transportation, ensuring timely deliveries and efficient movement of products worldwide.

Global Distribution

Our presence across Türkiye, the Middle East, Africa, and Asia enables us to respond efficiently to regional demand while maintaining dependable supply chains for customers across multiple industries.

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ENERGY BEYOND BORDERS

Let’s Start the Conversation

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