

Material Safety Data Sheet (MSDS) for Bitumen VG10, VG20, VG30, and VG40

Section 1: Identification

Product Name: Bitumen (VG10, VG20, VG30, VG40)

Application: Road construction, waterproofing, and industrial applications.

Section 2: Hazards Identification



Hazard Classification: Non-hazardous under normal conditions.

Health Hazards: Prolonged inhalation of fumes may cause respiratory irritation.

Physical Hazards: Heated bitumen can cause severe burns.

Environmental Hazards: Spills can cause contamination of water bodies.

Pictograms:

-  Health Hazard
 -  Flammable when heated
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Section 3: Composition/Information on Ingredients

- Bitumen (Asphalt) – 100%
CAS Number: 8052-42-4
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Section 4: First Aid Measures

Inhalation: Move to fresh air; seek medical attention if symptoms persist.

Skin Contact: Rinse with cool water; do not peel solidified bitumen from skin; seek medical help.

Eye Contact: Flush with water for at least 15 minutes; seek medical assistance.

Ingestion: Do not induce vomiting; seek medical attention immediately.

Section 5: Firefighting Measures

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Extinguishing Media: Dry chemical, CO₂, foam. Avoid using water on hot bitumen.

Fire Hazards: Releases toxic gases when burned.

Protective Equipment: Self-contained breathing apparatus (SCBA) and protective clothing.

Section 6: Accidental Release Measures

Personal Precautions: Wear protective gear.

Spill Control: Contain spill with sand or earth; avoid entry into water systems.

Cleanup Methods: Allow material to cool and solidify; collect for disposal.

Section 7: Handling and Storage

Handling: Use in well-ventilated areas; avoid inhalation of fumes.

Storage: Store in a cool, dry place away from heat sources.

Section 8: Exposure Controls/Personal Protection

Respiratory Protection: Mask or respirator for fumes.

Skin Protection: Heat-resistant gloves and protective clothing.

Eye Protection: Safety goggles.

Section 9: Physical and Chemical Properties

Property	VG10	VG20	VG30	VG40
Viscosity @ 60°C (Poise)	1000 ± 200	2000 ± 400	3000 ± 600	4000 ± 800
Softening Point (°C)	Min 40	Min 45	Min 47	Min 50
Penetration @ 25°C (mm/10)	80–100	60–80	50–70	40–60
Flash Point (°C)	Min 220	Min 230	Min 240	Min 250
Specific Gravity @ 25°C	1.01–1.05	1.01–1.05	1.01–1.05	1.01–1.05

Section 10: Stability and Reactivity

Stability: Stable under normal conditions.

Reactivity: Avoid strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, and sulfur oxides.

Section 11: Toxicological Information

Acute Toxicity: Fumes may cause irritation of the respiratory system.

Chronic Effects: Long-term exposure may cause skin irritation or dermatitis.

Section 12: Ecological Information

Environmental Impact: Not biodegradable; may persist in the environment.

Water Contamination: Avoid release into water bodies.

Section 13: Disposal Considerations

Waste Disposal: Dispose of in accordance with local regulations.

Packaging: Empty containers may contain residues; handle with caution.

Section 14: Transport Information

UN Number: 3257

Proper Shipping Name: Elevated Temperature Liquid, N.O.S. (Bitumen)

Hazard Class: 9

Packing Group: III

Section 15: Regulatory Information

International Regulations: Complies with ISO and ASTM standards for bitumen materials.

Local Regulations: Adhere to Dubai Municipality guidelines.

Section 16: Other Information

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