



MSDS / SDS — Oxidized Bitumen (Blown Bitumen)

Product name: Oxidized Bitumen / Blown Bitumen (various grades)

Synonyms: Blown asphalt, oxidized asphalt, industrial bitumen, roofing bitumen

Recommended use: Waterproofing membranes, roofing felt, pipe coating, mastic/asphalt compounds, sealants, insulation, corrosion protection

Restrictions on use: Not for food, pharma, medical, or cosmetic use.

Grades covered (examples)

Common commercial grades include (but are not limited to): **115/15, 110/15, 105/15, 100/15, 95/25, 90/25, 85/25, 80/25, 75/25, 75/35**, and other “Softening Point / Penetration” combinations.

1. Identification

Supplier: (ATDM)

Address: (3509 OF THE BURLINGTON TOWER, BUSINESS BAY, DUBAI-UAE))

Emergency phone: (0097142369830)

Date of issue / revision: (2026-15-02)

2. Hazard(s) Identification (GHS)

Classification

- **Solid product at ambient temperature:** Typically **not classified as hazardous** under GHS when handled as a solid at room temperature.
- **Important: Fumes/mists from heating** may be hazardous and can irritate respiratory tract. **Hot molten product** causes **severe thermal burns**.

Label elements (for most jurisdictions)

Pictograms: Not required for solid product.

Signal word: None (solid).

Hazard statements (practical):

- Heated product may release irritating fumes.
- Molten product causes thermal burns.
- Prolonged/repeated skin contact with oils/fumes may cause irritation/dermatitis.

Precautionary statements (recommended):

- Avoid breathing fumes/mists when heated; use local exhaust ventilation.
- Wear heat-resistant gloves/face protection when handling hot product.



- Wash skin after handling; remove contaminated clothing.

3. Composition / Information on Ingredients

Substance: Complex mixture of high-molecular-weight hydrocarbons produced by air-blowing (oxidation) of petroleum bitumen.

Typical composition: Predominantly asphaltenes, resins, aromatics, saturates; may contain trace sulfur, nitrogen compounds, and trace metals.

Ingredient (generic): Oxidized petroleum asphalt/bitumen — >99%

Impurities: Trace PAHs may be present (levels depend on crude source and process).

Note: Exact CAS numbers can vary by regional listing practices for asphalt/bitumen. Many SDSs treat this as “asphalt/bitumen (petroleum), oxidized.” If you want, you can add your internal product code and regulatory identifiers used in your target market

4. First-Aid Measures

Inhalation (fumes/mist from heating):

- Move to fresh air. Keep at rest. If symptoms persist (cough, irritation, headache), seek medical advice.

Skin contact (solid):

- Wash with soap and water. If irritation develops, seek medical advice.

Skin contact (molten/hot):

- **Do NOT attempt to peel off bitumen.**
- Cool immediately with plenty of cool water for at least 15 minutes.
- Cover with clean dressing. **Urgent medical attention required.**

Eye contact (dust/fume):

- Rinse cautiously with water for several minutes. Remove contact lenses if easy. Seek medical advice if irritation persists.

Ingestion:

- Not expected in normal industrial use. Rinse mouth. Do not induce vomiting. Seek medical advice if unwell.

Most important symptoms: Thermal burns, respiratory irritation from fumes, mild skin irritation.

5. Fire-Fighting Measures

Suitable extinguishing media: Foam, dry chemical, CO₂, sand/earth.

Unsuitable: High-pressure water jet (may spread burning material).

Specific hazards: Combustion produces CO, CO₂, smoke, and irritating fumes.

Protective equipment: Full protective gear and self-contained breathing apparatus (SCBA).

Fire-fighting instructions: Cool containers with water spray from a safe distance.

6. Accidental Release Measures

Solid product:

- Allow to cool and solidify (if warm). Mechanically collect (shovel/scrape).
- Prevent from entering drains/waterways.

Hot/molten product:

- Isolate area. Let cool/solidify; remove mechanically.
- Use PPE suitable for heat exposure.

Personal precautions: Heat-resistant gloves, safety shoes, long sleeves; respiratory protection if fumes present.

7. Handling and Storage

Handling:

- Avoid breathing fumes during heating. Use **local exhaust ventilation** at kettles/melters.
- Keep away from ignition sources when hot.
- Avoid prolonged skin contact; maintain good hygiene.

Storage:

- Store in a cool, dry, well-ventilated place away from strong oxidizers.
- Keep bags/drums closed and protected from direct sunlight and excessive heat.
- For bulk heated storage: control temperature to minimize fumes; use level/temperature alarms.

8. Exposure Controls / Personal Protection

Engineering controls: Local exhaust ventilation at heating points; general ventilation in warehouses.

PPE (cold/solid):

- Safety glasses, work gloves, protective clothing.

PPE (hot/molten):

- Face shield + safety goggles
- Heat-resistant gloves
- Heat-resistant long sleeves/apron
- Safety footwear
- Respiratory protection if ventilation is insufficient (organic vapor/particulate combination as required by site assessment)

Hygiene: Wash hands/skin after handling; do not eat/drink/smoke in work area.

9. Physical and Chemical Properties (Typical Ranges by Grade)

Below is a **usable commercial table**. Replace “Typical” with your **COA ranges** if you want it “PDF-ready”.

Grade property table (Oxidized Bitumen)

Grade (Softening/ Penetration)	Softening Point (°C)	Penetration (0.1 mm) @25°C	Flash Point (°C)	Solubility (CS ₂)	Appearance
75/25	70–80	20–30	≥230	≥99%	Black solid
80/25	78–85	20–30	≥230	≥99%	Black solid
85/25	83–90	20–30	≥230	≥99%	Black solid
90/25	88–95	20–30	≥230	≥99%	Black solid
95/25	93–100	20–30	≥230	≥99%	Black solid
100/15	98–105	10–20	≥230	≥99%	Black solid
105/15	103–110	10–20	≥230	≥99%	Black solid

Grade (Softening/ Penetration)	Softening Point (°C)	Penetration (0.1 mm) @25°C	Flash Point (°C)	Solubility (CS ₂)	Appearance
110/15	108–115	10–20	≥230	≥99%	Black solid
115/15	113–120	10–20	≥230	≥99%	Black solid

Odor: Slight petroleum odor (stronger when heated)

Water solubility: Insoluble

Relative density: ~1.0–1.1 (typical; depends on base bitumen)

Viscosity: Not applicable as solid; molten viscosity depends on temperature and grade

Auto-ignition: High; depends on conditions

Decomposition temperature: At excessive heating, emits fumes/smoke

If you tell me which oxidized grades you sell the most (example: 85/25, 90/25, 115/15), I can tighten this table so it matches your exact spec style (ASTM D36, D5, D92, etc.).

10. Stability and Reactivity

Reactivity: Not reactive under normal conditions.

Chemical stability: Stable.

Hazardous reactions: None expected.

Conditions to avoid: Excessive heating, open flames, hot surfaces.

Incompatible materials: Strong oxidizers (e.g., nitric acid, peroxides).

Hazardous decomposition products: CO, CO₂, smoke, irritating hydrocarbon fumes.

11. Toxicological Information

Likely routes of exposure: Inhalation (fumes when heated), skin contact, eye contact (fumes/dust).

Acute toxicity: Low for solid product; fumes may irritate.

Skin corrosion/irritation: May cause mild irritation; hot product causes thermal burns.

Serious eye damage/irritation: Fumes/particles may irritate eyes.

Respiratory sensitization: Not expected.

Carcinogenicity: Some asphalt/bitumen fumes have been evaluated in occupational contexts; risk depends on exposure levels and type of fume. **Control fumes and avoid chronic inhalation exposure.**

STOT (single/repeated): Repeated fume exposure may irritate respiratory system.

Aspiration hazard: Not applicable to solid product.

12. Ecological Information

Ecotoxicity: Not expected to be acutely toxic as a solid mass, but may harm organisms if released into the environment.

Persistence/degradability: Expected to be persistent.

Bioaccumulation: Some hydrocarbon components may bioaccumulate; mixture form limits availability.

Mobility in soil: Low mobility as solid; molten product can spread then solidify.

Other adverse effects: Avoid release to waterways.

13. Disposal Considerations

- Dispose in accordance with local regulations.
- Prefer recycling/reuse where permitted (industrial asphalt recovery).
- Solid waste: approved landfill/incineration as allowed.
- Do not discharge into drains or watercourses.

14. Transport Information

UN number: Usually **not regulated as dangerous goods** for transport in solid form.

Proper shipping name: Oxidized Bitumen (non-hazardous) / Asphalt (as applicable)

Class: Not applicable

Packing group: Not applicable

Marine pollutant: Generally not

Special precautions: If shipped hot in bulk, follow hot-material transport rules and site safety procedures.

Transport rules can differ by country and by shipping “hot.” If you export a lot, tell me your main routes (EU / Turkey / UAE / Africa) and I’ll format this section exactly to those norms.



15. Regulatory Information

- Product is typically treated as an industrial hydrocarbon mixture.
- Follow national chemical inventory and worker exposure rules.
- Workplace exposure: manage **fume exposure** during heating with ventilation and PPE.

16. Other Information

Training advice: Hot bitumen handling, burn response, ventilation, PPE selection, spill control.

Revision notes: First issue / general family SDS for oxidized bitumen grades.