



MATERIAL SAFETY DATA SHEET (MSDS)

Oxidized Bitumen 85/35

Product Name: Oxidized Bitumen 85/35

Other Names: Blown Bitumen 85/35, Oxidized Asphalt 85/35

Product Type: Oxidized Petroleum Bitumen

Grade: 85/35

Recommended Uses: Waterproofing, roofing, bituminous membranes, pipe coating, joint sealing, insulation, adhesives, industrial coatings, and construction applications.

1. Identification of the Substance and Company

Product Identifier: Oxidized Bitumen 85/35

Chemical Family: Petroleum Hydrocarbon / Oxidized Asphalt

Physical Form: Solid at ambient temperature

Intended Use: Industrial and construction applications

Emergency Advice: In case of serious exposure, fire, or accidental release, contact the appropriate local emergency or medical service.

2. Hazard Identification

Classification

At normal ambient temperature, Oxidized Bitumen 85/35 is generally handled as a solid material with relatively low exposure risk. The principal hazards occur when the product is heated for melting, processing, or application.

Main Hazards

- **Hot material can cause severe thermal burns.**
- Heating may generate fumes and vapors that can irritate the eyes and respiratory tract.
- Prolonged or repeated exposure to bitumen fumes should be minimized.
- Molten bitumen may ignite if excessively heated.
- Contact of hot bitumen with water can cause violent splashing or foaming.

Precautionary Measures

Use adequate ventilation when heating or processing the product. Wear appropriate heat-resistant gloves, protective clothing, safety footwear, and eye/face protection when handling molten material.

3. Composition / Information on Ingredients

Component	CAS Number	Concentration
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Oxidized Bitumen / Oxidized Asphalt	64742-93-4	Approx. 100%
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Description: Complex mixture of high molecular weight hydrocarbons produced by controlled oxidation (air blowing) of petroleum bitumen.

4. First-Aid Measures

Inhalation

Move the affected person to fresh air. Keep at rest. If coughing, respiratory irritation, dizziness,



or breathing difficulty persists, obtain medical attention.

Skin Contact – Cold Product

Wash contaminated skin thoroughly with soap and water.

Skin Contact – Hot/Molten Product

Immediately cool the affected area with plenty of clean, cool running water for at least 15–20 minutes. **Do not attempt to remove solidified bitumen from the skin.** Cover the affected area with a clean dressing and seek immediate medical attention.

Eye Contact

Flush carefully with clean water for at least 15 minutes. Remove contact lenses if easily possible. Seek medical attention if irritation persists. For contact with hot material, obtain immediate medical treatment.

Ingestion

Ingestion is unlikely under normal industrial conditions. Do not induce vomiting. Rinse mouth and obtain medical advice if significant quantities are swallowed.

5. Fire-Fighting Measures

Suitable Extinguishing Media

- Dry chemical powder
- Carbon dioxide (CO₂)
- Foam
- Water fog

Unsuitable Extinguishing Media

Do not apply a direct high-pressure water jet to hot or burning bitumen, as this may cause splashing and spread the burning material.

Specific Hazards

Combustion or thermal decomposition may generate:

- Carbon monoxide (CO)
- Carbon dioxide (CO₂)
- Hydrocarbon fumes
- Smoke and irritating decomposition products

Protective Equipment

Firefighters should wear appropriate protective clothing and self-contained breathing apparatus where necessary.

6. Accidental Release Measures

Personal Precautions

Keep unnecessary personnel away. Avoid contact with hot material and avoid breathing fumes.

Environmental Precautions

Prevent material from entering drains, waterways, or soil where practicable.

Cleanup

Cold material: Collect mechanically and place in suitable containers for reuse, recycling, or disposal.

Molten material: Allow the product to cool and solidify where safe to do so. Remove



mechanically after solidification.

7. Handling and Storage

Handling

- Avoid skin and eye contact with molten product.
- Avoid inhalation of fumes generated during heating.
- Provide adequate local or general ventilation.
- Do not overheat.
- Keep water away from molten bitumen.
- Use equipment suitable for handling hot bituminous materials.

Storage

Store in a cool, dry, well-ventilated area away from ignition sources and strong oxidizing agents. Protect packaged material from excessive heat and moisture. For heated bulk storage, use equipment designed for bitumen service and maintain temperatures at the minimum necessary for safe pumping and processing.

8. Exposure Controls / Personal Protection

Engineering Controls

Provide adequate ventilation, particularly in enclosed areas or where the product is heated.

Personal Protective Equipment

Eye/Face Protection: Safety glasses or goggles; face shield when handling molten product.

Hand Protection: Heat-resistant gloves for hot material. Suitable protective gloves should be used for prolonged handling.

Skin Protection: Long-sleeved protective clothing, safety footwear, and appropriate heat-resistant PPE.

Respiratory Protection: Normally not required for cold solid product. If fumes or vapors are generated and ventilation is insufficient, use suitable respiratory protection in accordance with local occupational safety requirements.

9. Physical and Chemical Properties

Property	Typical Information
Appearance	Black solid
Odor	Characteristic petroleum/bituminous odor
Physical State at Ambient Temperature	Solid
Softening Point	Approx. 80–90°C
Penetration at 25°C	Approx. 30–40 dmm
Typical Grade Specification	85/35
Solubility in Water	Insoluble
Density	Approx. 1.0–1.1 g/cm ³
Flash Point	Typically above 230°C
Flammability	Combustible when strongly heated



*Values are typical and may vary according to production source and applicable test method.
Product-specific TDS/COA should be used for guaranteed specifications.*

10. Stability and Reactivity

Chemical Stability: Stable under recommended storage and handling conditions.

Conditions to Avoid: Excessive heating, open flames, sparks, and other ignition sources.

Incompatible Materials: Strong oxidizing agents and water contacting hot/molten product.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, smoke, hydrocarbons, and irritating fumes may be generated during combustion or excessive heating.

11. Toxicological Information

Acute Toxicity

Low acute toxicity is expected under normal conditions of use.

Skin Contact

Cold solid material is not normally irritating during brief contact. Hot material causes serious thermal burns.

Eye Contact

Fumes may cause temporary eye irritation. Molten product can cause severe thermal injury.

Inhalation

Fumes generated during heating may cause irritation of the nose, throat, and respiratory system. Headache, nausea, or dizziness may occur at elevated exposure levels.

Chronic Exposure

Repeated or prolonged exposure to bitumen fumes should be controlled through appropriate engineering measures, work practices, and personal protection.

12. Ecological Information

The product is insoluble in water and has low mobility under normal environmental conditions.

Avoid uncontrolled release into the environment, drainage systems, surface water, or soil.

No significant acute aquatic exposure is expected from solid product because of its very low water solubility.

13. Disposal Considerations

Recover or recycle material whenever practicable.

Dispose of waste product and contaminated packaging in accordance with applicable local, national, and international regulations.

Do not dispose of molten bitumen into drains, sewers, or waterways.

14. Transport Information

At normal ambient temperature and in solid form, Oxidized Bitumen 85/35 is generally not treated as dangerous goods for transport under common international transport frameworks.

For transportation at elevated temperatures, additional dangerous-goods requirements may apply depending on the shipping temperature and mode of transport.

UN Number: Not normally applicable to cold solid product



Transport Hazard Class: Not normally regulated in solid form

Packing Group: Not normally applicable

Marine Pollutant: Generally not classified as a marine pollutant

Transport classification should always be verified against the actual physical condition, shipping temperature, route, and applicable regulations.

15. Regulatory Information

The product should be handled in accordance with applicable occupational health, environmental, chemical management, and transport regulations in the country of use. Users are responsible for determining applicable regulatory requirements for their specific jurisdiction and application.

16. Other Information

This MSDS provides general health, safety, handling, storage, and environmental information for **Oxidized Bitumen 85/35**.

The designation **85/35** generally refers to a softening point around **85°C** and penetration around **35 dmm**, subject to the manufacturer's specification and applicable test methods.

Disclaimer:

The information contained in this document is provided in good faith and is based on generally available technical and safety information for oxidized bitumen. It is intended as guidance for safe handling, storage, transportation, and use. Product specifications and regulatory classifications should be verified using the manufacturer's current Technical Data Sheet, Certificate of Analysis, and applicable local regulations.