



SAFETY DATA SHEET

SECTION 1 Identification

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| Product Identifier | UNISOURCE® SDA ASPHALT AC | |
| Other means of identification | bitumen; Asphalt (petroleum); Asphaltum; Mineral pitch; ASPHALT FUMES; Petroleum; Asphalt (petroleum) fumes; Bitumen fumes; Asphalt | |
| Recommended use | Petrochemical industry: Petroleum refining. Asphalt Other non-specified industry: PAVING AND ROAD-COATING; ROOFING; SEALING AND JOINT FILLING; SPECIAL PAINTS; ADHESIVE IN ELECTRICAL LAMINATES AND HOT-MELT COMPOSITIONS; DILUENT IN LOW-GRADE RUBBER PRODUCTS; FLUID LOSS CONTROL IN HYDRAULIC FRACTURING OF OIL WELLS; MEDIUM FOR RADIOACTIVE WASTE DISPOSAL; PIPELINE AND UNDERGROUND CABLE COATING; RUST-PREVENTIVE HOT-DIP COATINGS; BASE FOR SYNTHETIC TURF; WATER-RETAINING BARRIER FOR SANDY SOILS; SUPPORTER OF RAPID BACTERIAL GROWTH IN CONVERTING PETROLEUM COMPONENTS TO PROTEIN | |
| Recommended restrictions | None known. | |
| Manufacturer / Importer / Supplier / Distributor information | | |
| Company name | UNISOURCE-ENERGY, LLC | |
| Address | 40 Shuman Blvd, Suite 290 Naperville, IL 60563 | |
| Telephone | Phone: 630-470-6030 Fax: 630-470-6031 | |
| Website | www.unisource-energy.com | |
| Email | orders@unisource-energy.com | |
| Emergency Phone Numbers | UNISOURCE-ENERGY, LLC 1-800-444-5510 | CHEMTREC 1-800-424-9300 |

SECTION 2 Hazard(s) Identification

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| Emergency overview: | |
| Physical state | Solid. [solid or semi-solid preparations At Elevated Temperatures] |
| Color | Dark. Black. Brown. |
| Odor | Characteristic. Hydrocarbon. |
| Signal Word | CAUTION! |
| Hazard statements | Thermal hazards- Heated material can cause thermal burns. MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. |
| Precautionary measures | Do not eat, drink or smoke when using this product. Wash thoroughly after handling. |
| OSHA/HCS status | This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). |
| Routes of entry | Eyes, Skin, Ingestion, Inhalation |
| Potential acute health effects: | |
| Inhalation | Irritating to respiratory system. |
| Ingestion | HOT Material - May cause burns to mouth, throat and stomach. |
| Skin | HOT Material - Corrosive to the skin. Causes burns. |
| Eyes | HOT Material - Corrosive to eyes. Causes burns. |

See toxicological information (Section 11)



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| SECTION 3 | Composition / Information on Ingredients |
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| Chemical name | CAS number | % |
|---------------|------------|----------|
| Asphalt | 8052-42-4 | 99 - 100 |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

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| SECTION 4 | First-aid Measures |
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| Inhalation | Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately. |
| Skin contact | Call a physician if symptoms develop or persist. In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately. |
| Eye contact | Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately. |
| Ingestion | Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately. |
| Protection of first-aiders | No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. |

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| SECTION 5 | Fire-fighting Measures |
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| Flammability of the product | No specific fire or explosion hazard. |
| Extinguishing media: | |
| Suitable | Use an extinguishing agent suitable for the surrounding fire. |
| Not suitable | None known. |
| Specific exposure hazards | Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. |
| Hazardous thermal Decomposition products | Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides |
| Special protective equipment for fire-fighters | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |

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| SECTION 6 | Accidental Release Measures |
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| Personal precautions, | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8) |
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Environmental precautions Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaning up Large spills: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Small Spills: Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.

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| SECTION 7 | Handling and Storage |
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Handling Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

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| SECTION 8 | Exposure Controls / Personal Protection |
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| Ingredient | Value |
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| Asphalt | <p>NIOSH REL (United States, 6/2009). CEIL: 5 mg/m³ 15 minutes. Form: Fume ACGIH TLV (United States, 3/2012). TWA: 0.5 mg/m³, (as benzene soluble aerosol) 8 hours. Form: Inhalable fraction</p> |

Recommended monitoring procedures If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required



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| Engineering measures | No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits. |
| Hygiene measures | Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. |
| Personal Protection: Respiratory | Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. |
| Hands | Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. |
| Eyes | Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. |
| Skin | Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
| Environmental exposure controls | Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. |

SECTION 9**Physical and Chemical Properties**

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| Physical state | Solid. [solid or semi-solid preparations At Elevated Temperatures] |
| Flash point | Closed cup: >200°C (>392°F) |
| Auto-ignition temperature | >400°C (>752°F) |
| Color | Dark. Black. Brown. |
| Odor | Characteristic. Hydrocarbon. |
| Boiling/condensation point | >300°C (>572°F) |
| Melting/freezing point | 54 to 173°C (129.2 to 343.4°F) |
| Relative density | 1 to 1.18 |
| Solubility | Insoluble in the following materials: cold water and hot water. |

SECTION 10**Stability and Reactivity**

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| Chemical stability | The product is stable. |
| Conditions to avoid | No specific data. |
| Incompatible materials | No specific data. |



Hazards decomposition products
Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous decomposition products should not be produced.
 Under normal conditions of storage and use, hazardous reactions will not occur.

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| SECTION 11 | Toxicological Information |
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Acute toxicity

| Product / ingredient name | Result | Species | Dose | Exposure |
|---------------------------|-----------|---------|-------------|----------|
| Asphalt | LD50 oral | Rat | >5000 mg/kg | - |

Conclusion/summary Not available.

Chronic toxicity

Conclusion/summary Not available.

Carcinogenicity

Conclusion/summary Not available.

Classification

| Product / ingredient name | ACGIH | IARC | EPA | NIOSH | NTP | OSHA |
|---------------------------|-------|------|-----|-------|-----|------|
| Asphalt | A4 | 3 | - | + | - | - |

Mutagenicity

Conclusion/summary Not available.

Teratogenicity

Conclusion/summary Not available.

Reproductive toxicity

Conclusion/summary Not available.

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| SECTION 12 | Ecological Information |
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Ecotoxicity:**Aquatic ecotoxicity**

Conclusion/summary Not available.

Persistence/degradability

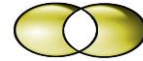
Conclusion/summary Not available.

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| SECTION 13 | Disposal Considerations |
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Waste disposal

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.



Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

| SECTION 14 | | | | | | | Transport Information | | | | | | |
|------------------------|-----------|---|---------|---------------|-------|--|-----------------------|--|--|--|--|--|--|
| Regulatory information | UN Number | Proper shipping name | Classes | Packing group | Label | Additional information | | | | | | | |
| DOT Classification | UN3257 | Elevated temperature liquid, n.o.s. (Asphalt) | 9 | III | | Packaging instruction Passenger aircraft Quantity limitation: Forbidden. Cargo aircraft Quantity limitation: Forbidden. Special provisions IB1, T3, TP3, TP29 | | | | | | | |
| IMDG Class | UN3257 | Elevated temperature liquid, n.o.s. (Asphalt) | 9 | III | | Emergency schedules (EmS) F-A, S-P | | | | | | | |
| IATA-DGR Class | UN3257 | Elevated temperature liquid, n.o.s. (Asphalt) | 9 | - | | Passenger and Cargo Aircraft Quantity limitation: Forbidden Packaging instructions: Forbidden Cargo Aircraft Only Quantity limitation: Forbidden Packaging instructions: Forbidden Limited Quantities - Passenger Aircraft Quantity limitation: Forbidden Packaging instructions: Forbidden | | | | | | | |

**SECTION 15****Regulatory Information**

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| HCS Classification | Target organ effects. |
| U.S. Federal regulations: | |
| TSCA 8(a) CDR Exempt/ Partial exemption | This material is listed or exempted |
| United States inventory (TSCA 8b) | This material is listed or exempted |
| SARA 302/304 | No products were found |
| SARA 311/312 Hazards identification | Delayed (chronic) health hazard |
| Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) | Not listed |
| Clean Air Act Section 602 Class I Substances | Not listed |
| Clean Air Act Section 602 Class II Substances | Not listed |
| DEA List I Chemicals (Precursor Chemicals) | Not listed |
| DEA List II Chemicals (Essential Chemicals) | Not listed |
| State regulations: | |
| Massachusetts | This material is listed. |
| New York | This material is not listed. |
| New Jersey | This material is listed. |
| Pennsylvania | This material is listed. |
| California Prop 65 | This product is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. |
| Canada: | |
| WHIMS (Canada) | Not controlled under WHMIS (Canada). |
| Canadian Lists: | |
| Canadian NPRI | This material is not listed. |
| CEPA Toxic substances | This material is not listed. |
| Canada Inventory | This material is listed or exempted. |
| International Regulations: | |
| International Lists: | |
| Australia inventory (AICS) | This material is listed or exempted. |
| China inventory (IECSC) | This material is listed or exempted. |
| Japan inventory | This material is listed or exempted. |
| Korea inventory | This material is listed or exempted. |
| Malaysia Inventory (EHS Register) | Not determined. |
| New Zealand Inventory of Chemicals (NZIoC) | This material is listed or exempted. |
| Philippines inventory (PICCS) | This material is listed or exempted. |
| Taiwan inventory (CSNN) | Not determined. |
| European inventory | This material is listed or exempted. |
| Chemical Weapons Convention List Schedule I Chemicals | Not listed |



Chemical Weapons
Convention List Schedule
II Chemicals
Chemical Weapons
Convention List Schedule
III Chemicals

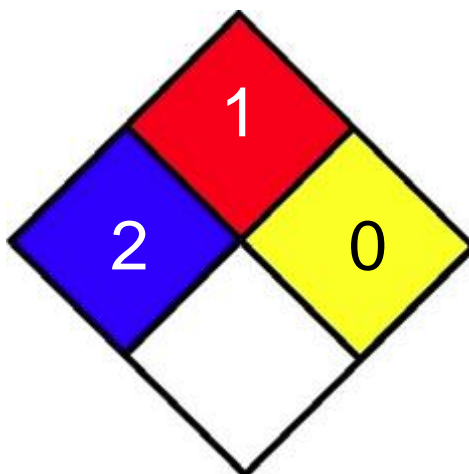
Not listed

Not listed

SECTION 16**Other Information**

Label requirements Thermal hazards- Heated material can cause thermal burns. MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

**Hazardous Material
Information System (U.S.A.)**



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

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Disclaimer The information in the sheet was written based on the best knowledge and experience currently available.